A Bibliography on the Biochemistry, Nutrition, and Related Areas of Aquatic Mammals and Arctic People to 1983

M. Yurkowski

Western Region
Department of Fisheries and Oceans
Winnipeg, Manitoba R3T 2N6

May 1985

Canadian Technical Report of Fisheries and Aquatic Sciences No. 1361

86-0053/

Canadian Technical Report of Fisheries and Aquatic Sciences

Technical reports contain scientific and technical information that contributes to existing knowledge but which is not normally appropriate for primary literature. Technical reports are directed primarily toward a worldwide audience and have an international distribution. No restriction is placed on subject matter and the series reflects the broad interests and policies of the Department of Fisheries and Oceans, namely, fisheries and aquatic sciences.

Technical reports may be cited as full publications. The correct citation appears above the abstract of each report. Each report is abstracted in *Aquatic Sciences and Fisheries Abstracts* and indexed in the Department's annual index to scientific and technical publications.

Numbers 1–456 in this series were issued as Technical Reports of the Fisheries Research Board of Canada. Numbers 457–714 were issued as Department of the Environment, Fisheries and Marine Service, Research and Development Directorate Technical Reports. Numbers 715–924 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Technical Reports. The current series name was changed with report number 925.

Technical reports are produced regionally but are numbered nationally. Requests for individual reports will be filled by the issuing establishment listed on the front cover and title page. Out-of-stock reports will be supplied for a fee by commercial agents.

Rapport technique canadien des sciences halieutiques et aquatiques

Les rapports techniques contiennent des renseignements scientifiques et techniques qui constituent une contribution aux connaissances actuelles, mais qui ne sont pas normalement appropriés pour la publication dans un journal scientifique. Les rapports techniques sont destinés essentiellement à un public international et ils sont distribués à cet échelon. Il n'y a aucune restriction quant au sujet; de fait, la série reflète la vaste gamme des intérêts et des politiques du ministère des Pêches et des Océans, c'est-à-dire les sciences halieutiques et aquatiques.

Les rapports techniques peuvent être cités comme des publications complètes. Le titre exact paraît au-dessus du résumé de chaque rapport. Les rapports techniques sont résumés dans la revue *Résumés des sciences aquatiques et halieutiques*, et ils sont classés dans l'index annual des publications scientifiques et techniques du Ministère.

Les numéros 1 à 456 de cette série ont été publiés à titre de rapports techniques de l'Office des recherches sur les pêcheries du Canada. Les numéros 457 à 714 sont parus à titre de rapports techniques de la Direction générale de la recherche et du développement, Service des pêches et de la mer, ministère de l'Environnement. Les numéros 715 à 924 ont été publiés à titre de rapports techniques du Service des pêches et de la mer, ministère des Pêches et de l'Environnement. Le nom actuel de la série a été établi lors de la parution du numéro 925.

Les rapports techniques sont produits à l'échelon régional, mais numérotés à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page du titre. Les rapports épuisés seront fournis contre rétribution par des agents commerciaux.

Canadian Technical Report of
Fisheries and Aquatic Sciences 1361

May 1985

A BIBLIOGRAPHY ON THE BIOCHEMISTRY, NUTRITION, AND RELATED AREAS OF AQUATIC MAMMALS AND ARCTIC PEOPLE TO 1983

by

M. Yurkowski

Western Region
Department of Fisheries and Oceans
Winnipeg, Manitoba R3T 2N6

This is the 182nd Technical Report
from the Western Region, Manitoba

ERRATA

Yurkowski, M. 1985. A bibliography on the biochemistry, nutrition and related areas of aquatic mammals and Arctic peoples to 1983. Can. Tech. Rep. Fish. Aquat. Sci. 1361: iv + 236 p.

Page 1. Under "Genus species (common names)" and "Page" Cephalorhynchus commersoni is on "p.133" not "p.153".

Page 133. Spelling of "Eschrictiidae" near bottom of page should be "Eschrichtidae"

© Minister of Supply and Services Canada 1985

Cat no. Fs 97-6/1361E ISSN 0706-6547

Correct citation for this publication is

Yurkowski, M. 1985 A bibliography on the biochemistry, nutrition, and related areas of aquatic mammals and Arctic people to 1983. Can. Tech. Rep. Fish. Aquat. Sci. 1361: iv + 236 p.

TABLE OF CONTENTS

	Page
ABSTRACT/RESUME	iv
INTRODUCTION	1
FORMAT OF THE BIBLIOGRAPHY	1
Author index	1
Taxonomic index	1
Subject index	1
COMPILATION OF THE BIBLIOGRAPHY	1
NOTES ON THE INDICES	1
Author index	1
Taxonomic index	1
Subject index	1
ALPHABETIC LIST (INCLUDING PAGE NUMBERS) OF AQUATIC MAMMALIAN SPECIES AND INUIT	2
ACKNOWLEDGMENTS	3
AUTHOR INDEX	3
TAXONOMIC INDEX	119
Marine mammals	119
Cetacea	122
Mystoceti	128
Balaenidae (right and bowhead whales)	128
Balaenopteridae (rorqual and humpback whales)	128
Eschrichtidae (gray whales)	133
Odontoceti	133
Delphinidae (dolphin)	133
Globicephalidae (pilot and killer whales)	138
Grampidae (Rosso's dolphin)	139
Kogiidae (pigmy sperm whales)	139
Monodontidae (beluga and narwhal)	139
Phocoenidae (porpoises)	141
Platanistidae (freshwater dolphins)	142
Physeteridae (sperm whales)	142
Ziphiidae (beaked whales)	146
Pinnipedia	147
Otarioidea	151
Odobenidae (walrus)	151
Otariidae (Arctocephalinae) (fur seals)	152
Otariidae (Otariinae) (sea lions)	155
Phocoidea	157
Phocidae (Cystophorinae) (elephant seals)	157
Phocidae (Monachinae) (southern seals)	159
Phocidae (Phocinae) (northern seals)	162
Mustelidae	173
Ursidae (bears)	174
Inuit (Eskimo)	175
SUBJECT INDEX	175
Anaesthesia (tranquillization; immobilization)	175
Bibliography (reviews)	176
Biological sonar	177
Carbohydrates and energetics	178
Care in captivity (husbandry, transportation, medicine, etc.)	181
Diving	182
Endocrinology	183
Enzymes	186
Food	188
Haematology	192
Lipids	196
Milk and lactation	204
Minerals	206
Molting	207
Myoglobins	208
Nucleic acids	209
Nutrition (includes growth)	210
Products (all marine animal products)	212
Proteins (includes amino acids and other nitrogeneous compounds)	214
Proximate composition (products; tissues)	217
Reproduction	218
Special topics (see explanation given under Notes on Subject Index)	220
Taxonomy and evolution (biochemical genetics; population dynamics)	227
Thermoregulation	229
Toxic compounds	230
Vitamins	234
Water balance	235

ABSTRACT

Yurkowski, M. 1985. A bibliography on the biochemistry, nutrition, and related areas of aquatic mammals and Arctic peoples to 1983. Can. Tech. Rep. Fish. Aquat. Sci. 1361: iv + 236 p.

The bibliography proper consists of some 3 100 references in alphabetic order by author covering the biochemistry, nutrition, and related areas of aquatic mammals and Arctic peoples. Taxonomic and subject indexes to the citations listed are given. In the taxonomic index references are listed under marine mammals, Cetacea, Pinnipedia, genera and species of Cetacea, Pinnipedia, Ursidae and Mustelidae, and Inuit. In the subject index the references are listed under 28 areas, some of which are interrelated. Citations date from 1845 to 1983.

Key words: whale; seal; sea lion; walrus; sea otter; polar bear; Eskimo; toxic compounds; food; Inuit; Cetacea; Pinnipedia; Ursidae; Mustelidae.

RESUME

Yurkowski, M. 1985. A bibliography on the biochemistry, nutrition, and related areas of aquatic mammals and Arctic peoples to 1983. Can. Tech. Rep. Fish. Aquat. Sci. 1361: iv + 236 p.

La bibliographie comporte quelque 3 100 références classées alphabétiquement par auteur, et portant sur la biochimie des mammifères aquatiques et des peuples de l'Arctique, ainsi que sur leur nutrition et d'autres domaines connexes. L'on y trouve les index taxinomiques, et l'index par matières. Dans l'index taxinomique, les entrées sont faites à mammifères marins, cétacés, pinnipèdes, d'ursidés et de mustélidés, ainsi que Inuit. Dans l'index par matières, les références sont répertoriées selon 28 domaines dont certains connexes. Les citations datent de 1845 à 1983.

Mots-clés: baleine; phoque; lion de mer; morse; loutre de mer; ours polaire; eskimo; substances toxiques; aliments; Inuit; cétacés; pinnipèdes; ursidés; mustélidés.

INTRODUCTION

Although various species of aquatic mammals (Cetacea, Pinnipedia, Ursidae and Mustelidae) are becoming less significant to the commercial fishery of the world, some are still important to the subsistence hunt for the peoples of the Arctic. The over-exploitation and activities of man are creating conditions that are leading to the extinction of some species. If we are to know the ecological implications to the well-being and survival of aquatic mammal species, studies on the various effects of biochemistry, nutrition and related areas such as toxicology are important to provide the necessary information or knowledge.

This bibliography was compiled to provide a ready source of published information on biochemistry, nutrition, and related areas of most species of aquatic mammals and Inuit. The generic, specific common and scientific names are given in the taxonomic index. Genus and species names in most cases are those given in the references. Authorities for specific names follow Ridgway (1972a). The most recent acceptable common names are given in brackets.

FORMAT OF THE BIBLIOGRAPHY

AUTHOR INDEX

The author index is the bibliography proper. References are listed first alphabetically by authors and then chronologically by year of publication. For purposes of keying in the taxonomic and subject index, the references with same authors (two or less), or same first author (more than two authors), and same year of publication are differentiated by placing small letters after the year of publication.

TAXONOMIC INDEX

The taxonomic index is the key to references on the various mammals covered. The genera and species of Cetacea are listed by family and those of Pinnipedia by family then sub-family. Under each family or sub-family, genera and species are listed alphabetically. In the Table of Contents the sub-family or family names are listed. See "NOTES ON THE INDICES" for a full list of genera and species covered in the bibliography.

SUBJECT INDEX

The subject index provides a key to references by 28 subject areas. These are listed under subject index in the Table of Contents. The comments in the list (shown in parentheses) explain topics covered by that heading.

COMPILATION OF THE BIBLIOGRAPHY

The bibliography has been primarily compiled from manual searches of Chemical Abstracts (from 1947 to 1983) and Biological Abstracts (1926 to 1983). Bibliographies on Pinnipedia (Ronald et al. 1976, 1983), references cited by Ridgway (1972a) and other available papers were also searched for relevant material. For the year 1983, CAN/SDI: BIOSIS Previews (Biological Abstracts) searches were also made. Some relevant references prior to 1926 especially those of Cetacea, polar bear and sea otter are expected to be missing. However, it is hoped that most major references are provided and can be located in libraries.

NOTES ON THE INDICES

AUTHOR INDEX

The titles of journals have been abbreviated following "Serial Sources for the BIOSIS data base" when listed. Those not listed in this book have been abbreviated as in "Chemical Abstracts Service Source Index."

When the title of non-English language publications is known; they are given in that language. However, some of the sources only gave titles in English. As far as possible the original language of the paper is indicated in parentheses at the end of the citation. Some references lack final page numbers or other details but we trust that sufficient detail is given to allow users to find the papers in a library.

TAXONOMIC INDEX

References are listed under marine animals (in general) followed by Cetacea, Pinnipedia, Mustelidae (Enhydra lutris), Ursidae (Ursus maritimus) and Inuit. Cetacea and Pinnipedia are broken down into families and species following Ridgway (1972). Users are referred back to the author index using the conventional author and date. Lower case "a", "b", etc. are used to differentiate between papers by the same author(s) (for more than two authors, the first author and "et al." was used) in the same year. Notes in parentheses indicate the general subject matter including applicable subject index area(s) in a paper.

SUBJECT INDEX

References are listed under 28 subject areas (for names of areas and their explanations (except for "special topics") in parenthesis, refer to subject index in Table of Contents). Subject area "special topics" covers references not covered under the other 27 areas and those providing general (biology; ecology) and specific (tissue sampling; tagging; ageing; strandings; noise; diseases; weight measurements of bodies, organs and tissues; regulations, etc.) information relevant to nutritional and biochemical studies of aquatic mammals. Users are referred back to the Author Index using the convention of author and date. Lower case "a", "b", etc. are used to differentiate between papers by the same author(s) (for more than two authors, the first author and "et al." was used) in the same year. Notes in parenthesis indicate

taxonomic index name(s) of animal(s) studied and general subject matter in a paper.

ALPHABETIC LIST OF AQUATIC MAMMALIAN SPECIES AND INUIT

All genus and species names (including common names in parenthesis) are listed alphabetically with page numbers to the taxonomic index proper. Papers using different pinniped genus and species names, given in parenthesis and similar to those of King (1983), were converted to those according to Ridgway (1972a).

Genus species (Common names) Page

Arctocephalus australis (Falkland's or South American fur seal) 152
Arctocephalus doriferus (Australian fur seal) 152
Arctocephalus forsteri (New Zealand fur seal) 152
Arctocephalus galapagoensis (Galapagos fur seal) 152
Arctocephalus gazella (Antarctic or Kerguelen fur seal) 152
Arctocephalus philippii (Otaria phillippi) (Juan Fernandez or Guadalupe fur seal) 152
Arctocephalus pusillus (Cape or South African fur seal) 152
Arctocephalus tasmanicus (Sub-species of Australian fur seal) 152
Arctocephalus tropicalis (Amsterdam Island or subantarctic fur seal) 153
Arctocephalus spp. 153
Balaena australis 128
Balaena glacialis 128
Balaena mysticetus (Bowhead, great polar, Arctic or Greenland right whale) 128
Balaena sieboldii (northern right whale) 128
Balaena spp. 128
Balaenoptera acutorostrata (Minke, little piked or little finner whale; lesser rorqual) 128
Balaenoptera borealis (northern or Rudolphi's rorqual; pollack, sardine, Japan finner or sei whale) 128
Balaenoptera brydei 130
Balaenoptera davidsoni 130
Balaenoptera edeni (Bryde's whale) 130
Balaenoptera musculus (blue or great whale; Sibbold's rorqual) 130
Balaenoptera physalus (fin or finback whale; common rorqual) 130
Balaenoptera sibbaldi (blue whale) 132
Berardius bairdi (Baird's beaked or Pacific beaked whale) 146
Berardius spp. 146
Callorhinus ursinus (northern, Alaskan or Pribilof fur seal) 153
Cephalorhynchus commersoni (Commerson's dolphin; piebald dolphin; Le Jacobite) 153
Cystophora cristata (hooded, crested or bladdernose seal) 157
Delphinapterus leucas (beluga or white whale) 139
Delphinus delphis (common dolphin) 134
Delphinus longirostris 134
Delphinus spp. 134
Enhydra lutris (sea otter) 173
Erignathus barbatus (bearded seal) 162
Eschrichtius gibbosus (California gray whale) 133
Eschrichtius glaucus 133
Eschrichtius robustus (gray whale) 133
Eumetopias jubata (Eumetopias jubatus) Steller's or northern sea lion) 155
Eubalaena glacialis (black right or right whale) 128
Feresa attenuata (slender blackfish, slender pilot or pygmy killer whale) 138
Globicephala macrorhyncha (short-finned blackfish) 138
Globicephala melaena (pilot whale; Atlantic blackfish; calling whale) 138
Globicephala scammoni (Pacific pilot whale; blackfish) 138
Globicephala spp. 138
Grampus griseus (Risso's dolphin) 139
Halichoerus grypus (gray or Atlantic seal) 162
Histriophoca fasciata (Phoca fasciata) (ribbon harnessed, saddled or banded seal) 164
Hydrurga leptonyx (leopard seal) 159
Hyperoodon ampullatus (bottle-nosed whale) 146
Hyperoodon planifrons (southern bottle-nosed whale) 146
Hyperoodon rostratus 146
Inia geoffrensis (Amazon River dolphin; pink porpoise) 142
Inuit (Eskimo) 175
Kogia breviceps (pigmy sperm whale; lesser cachalot) 139
Kogia simus (Owen's pigmy sperm whale) 139
Lagenodelphis hosei 134
Lagenorhynchus acutus (Atlantic white-sided dolphin) 134
Lagenorhynchus albirostris (white-beaked dolphin) 134
Lagenorhynchus obliquidens (Pacific white-sided or Pacific white-striped dolphin) 134
Lagenorhynchus obscurus (dusky dolphin) 135
Leptonychotes weddelli (Weddell seal) 160
Lipotes vexillifer (baiji; Chinese Lake, Chinese River or white flag dolphin; peic'ha) 142
Lissodelphis borealis (northern right whale dolphin) 135
Lissodelphis peroni (southern right whale dolphin) 135
Lobodon carcinophagus (crabeater seal) 161
Megaptera nodosa (humpback whale) 132
Megaptera novaeangliae (humpback whale) 133
Mesoplodon bidens (Sowerby's beaked whale) 146
Mesoplodon densirostris (Blainville's beaked whale) 146
Mesoplodon sp. 146
Mirounga angustirostris (northern elephant seal) 158
Mirounga leonina (southern elephant seal) 159
Mirounga spp. 159
Monachus monachus (Mediterranean monk seal) 161
Monachus schauinslandi (Laysan monk or Hawaiian monk seal) 161
Monodon monoceros (narwhal; monodon; unicorn whale) 140
Neomeris phocoenoides 141
Neophoca cinerea (Australian sea lion) 155
Neophoca hookeri (Phocarctos hookeri) (New Zealand or Hooker's sea lion) 156
Neophocoena asiaeorientalis (finless black porpoise) 141
Neophocoena sunamari 141
Neophocoena phocoenoides (finless black porpoise; Indian porpoise) 141
Odobenus rosmarus (walrus) 151
Ommatophoca rossi (Ross or big-eyed seal) 162
Orcinus orca (Atlantic killer whale); (includes Orcinus rectipenna (Pacific killer whale)) 138
Otaria byronia (Otaria jubata; Otaria byrnia) (southern or South American sea lion) 156
Pagophilus groenlandicus (Phoca groenlandica) (harp or Greenland seal) 164

Peponocephala electra (many-toothed blackfish; finless porpoise) 139
Phoca kurilensis (Kurile Island seal) 167
Phoca largha (Largha seal) 167
Phoca vitulina (harbor, spotted or common seal) 167
Phoca spp. 171
Phocoena phocoena (harbor or common porpoise) 141
Phocoenoides dalli (Dall porpoise) 142
Physeter catodon (sperm whale; cachalot) 142
Physeter macrocephalus 144
Physeter spp. 144
Platanista gangetica (Ganges River, blind or gangetic dolphin; Ganges susu) 142
Platanista indi 142
Platanista minor 142
Pontoporia blainvillei (La Plata River dolphin; Franciscana) 142
Pseudorca crassidens (false killer whale) 139
Pusa caspica (Phoca caspica) (Caspian seal) 171
Pusa hispida (Phoca hispida) (ringed seal) 171
Pusa sibirica (Phoca sibirica) (Baikal seal) 173
Sotalia fluviatilis (Amazon dolphin; buffeo negro; tucuxi; pirayaguara) 135
Sotalia guianensis (Guiana dolphin) 135
Sousa plumbea (Plumbeous dolphin) 135
Stenella attenuata (white-dotted dolphin or slender beaked porpoise) 135
Stenella coeruleoalba (blue white dolphin or little toothed whale) 135
Stenella frontalis (bridled dolphin) 135
Stenella graffmani (Graffman's porpoise) 136
Stenella longirostris (long-beaked, spinner, long-snouted dolphin) 136
Stenella plagiodon (spotted dolphin) 136
Stenella styx (Gray's porpoise) 136
Stenella spp. 136
Steno bredanensis (rough-toothed dolphin) 136
Tursiops aduncus 136
Tursiops gilli (Gill's bottle-nosed dolphin; cowfish) 136
Tursiops truncatus (Atlantic bottle-nosed dolphin; bottle-nosed porpoise) 136
Tursiops tursio 138
Tursiops spp. 138
Ursus maritimus (polar bear) 174
Zalophus californianus (Californian sea lion) 156
Ziphius cavirostris (goose beaked or Cuvier's beaked whale) 146
Ziphius spp. 147

ACKNOWLEDGMENTS

Thanks to Mr. Eric Marshall for his suggestions, criticism and assistance in the preparation of this bibliography.

AUTHOR INDEX

ABE, K., and Y. TAMAI. 1981. Lipid compositions of the brain of giant panda and a brown bear. Analysis of linear chain and α-hydroxy fatty acids by capillary column gas-liquid chromatography. Shinkei Kagaku 20: 148-151. (In Japanese)

ABE, T., M. KAZAMA, and M. MATSUDA. 1965. Anticoagulant activity of whale heparin and its characteristics. Israel J. Med. Sci. 2: 862- .

ABE, T., M. KAZAMA, M. MATSUDA, R. IKEMORI, and T. SHIBATE. 1968. Anticoagulant activity of whale intestinal heparin and its clinical application. Bibl. Haematol. 29: 1141- .

ABE, Y., and Y. SODA. 1953. Chemical studies on the whale body. I. Studies of baleens from fin and blue whales by the electron microscope and the isolation of lipides from them. Bull. Jpn. Soc. Sci. Fish. 18: 287-292.

ABEGGLEN, C.E., A.Y. ROPPEL, and D.W. RICE. 1963. Marine mammals, p. 209-216. In M.E. Stansby (ed.) Industrial fishery technology. Reinhold, New York.

ACKEFORS, H. 1977. Production of fish and other animals in the sea. Ambio 6: 192-200.

ACKMAN, R.G. 1966. Empirical relationships between iodine value and polyunsaturated fatty acid content in marine oils and lipids. J. Am. Oil Chem. Soc. 43: 385-389.

ACKMAN, R.G., and R.D. BURGHER. 1963. Component fatty acids of milk of the grey (Atlantic) seal. Can. J. Biochem. Physiol. 41: 2501-2505.

ACKMAN, R.G., R.D. BURGHER, and P.M. JANGAARD. 1963. Systematic identification of fatty acids in the gas-liquid chromatography of fatty acid methyl esters: a preliminary survey of seal oil. Can. J. Biochem. Physiol. 41: 1627-1641.

ACKMAN, R.G., and J.D. CASTELL. 1966. Isomeric monoethylenic fatty acids in herring oil. Lipids 1: 344-348.

ACKMAN, R.G., and C.A. EATON. 1966. Lipids of the fin whale (Balaenoptera physalus) from North Atlantic waters. III. Occurrence of eicosenoic and docosenoic fatty acids in the zooplankter, Meganyctiphanes norvegica, and their effect on whale oil composition. Can. J. Biochem. 44: 1561-1566.

ACKMAN, R.G., and C.A. EATON. 1966a. Some commercial Atlantic herring oils; fatty acid composition. J. Fish. Res. Board Can. 23: 991-1006.

ACKMAN, R.G., and C.A. EATON. 1967. Fatty acid composition of the decapod shrimp, Pandalus borealis, in relation to that of the euphausid, Meganyctiphanes norvegica. J. Fish. Res. Board Can. 24: 467-471.

ACKMAN, R.G., and C.A. EATON. 1971. Investigation of the fatty acid composition of oils and lipids from the sand lance, Ammodytes americanus, from Nova Scotian waters. J. Fish. Res. Board Can. 28: 601-606.

ACKMAN, R.G., and C.A. EATON. 1977. Absence of pathological effects of docosenoic acids in seal hearts, p. 3-121 - 3-127. In M. Naudet, E. Ucciani and A. Uzzan (ed.) Symposium: dietetic and nutritional aspects, Proceedings of the 13th. World Congress

of the International Society on Fat Research Symposium 3.

ACKMAN, R.G., C.A. EATON, and N. CREWE. 1977. Grey seal (Halichoerus grypus) dam pup transfer of fatty acids. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1977/N:21.

ACKMAN, R.G., C.A. EATON, and S.N. HOOPER. 1968. Lipids of the fin whale (Balaenoptera physalus) from the north Atlantic waters. IV. Fin whale milk. Can. J. Biochem. 46: 197-203.

ACKMAN, R.G., C.A. EATON, and P.M. JANGAARD. 1965a. Lipids of the fin whale (Balaenoptera physalus) from north Atlantic waters. I. Fatty acid composition of whole blubber and blubber sections. Can. J. Biochem. 43: 1513-1520.

ACKMAN, R.G., C.A. EATON, and P.M. JANGAARD. 1965b. Lipids of the fin whale (Balaenoptera physalus) from north American waters. II. Fatty acid composition of the liver lipids and gas-liquid chromatographic evidence for the occurrence of 5,8,11,14-nonadecatetraenoic acid. Can. J. Biochem. 43: 1521-1530.

ACKMAN, R.G., C.A. EATON, and P.J. KE. 1967a. Canadian marine oils of low iodine value: fatty acid composition of oils from Newfoundland turbot (Greenland halibut), certain Atlantic herring, and a sablefish. J. Fish. Res. Board Can. 24: 2563-2572.

ACKMAN, R.G., C.A. EATON, J. KINNEMAN, and C. LITCHFIELD. 1975a. Lipids of fresh water dolphin, Sotalia fluviatilis. Comparison of odontocete bioacoustic lipids and habitat. Lipids 10: 44-49.

ACKMAN, R.G., C.A. EATON, and C. LITCHFIELD. 1971a. Composition of wax esters, triglycerides and diacylglyceryl ethers in the jaw and blubber fats on the Amazon river dolphin (Inia geoffrensis). Lipids 6: 69-77.

ACKMAN, R.G., C.A. EATON, and E.D. MITCHELL. 1971b. Bottle-nosed dolphin, Tursiops truncatus. Fatty acid composition of milk triglycerides. Can. J. Biochem. 49: 1172-1174.

ACKMAN, R.G., C.A. EATON, and B. SCHIEFER. 1979. Long-term exposure to docosenoic acids in animals: absence of myocardial lesions in harp seal (Pagophilus groenlandicus) and grey seal (Halichoerus grypus). Can. J. Anim. Sci. 59: 247-254.

ACKMAN, R.G., C.A. EATON, J.C. SIPOS, S.N. HOOPER, and J.D. CASTELL. 1970. Lipids and fatty acids of two species of north Atlantic krill, Meganyctiphanes norvegica and Thysanoessa inermis, and their role in the food web. J. Fish. Res. Board Can. 27: 513-533.

ACKMAN, R.G., S. EPSTEIN, and C.A. EATON. 1971c. Differences in the fatty acid compositions of blubber fats from northwestern Atlantic finwhales (Balaenoptera physalus) and harp seals (Pagophilus groenlandicus). Comp. Biochem. Physiol. 40B: 683-697.

ACKMAN, R.G., and R.P. HANSEN. 1967. The occurrence of diastereomers of phytanic and pristanic acids and their determination by gas-liquid chromatography. Lipids 2: 357-362.

ACKMAN, R.G., J.H. HINGLEY, C.A. EATON, H.V. LOGAN, and P.H. ODENSE. 1975b. Layering and tissue composition of the blubber of the northwest Atlantic sei whale (Balaenoptera borealis). Can. J. Zool. 53: 1340-1344.

ACKMAN, R.G., J.H. HINGLEY, C.A. EATON, J.C. SIPOS, and E.D. MITCHELL. 1975c. Blubber fat deposition in Mystoceti whales. Can. J. Zool. 53: 1332-1339.

ACKMAN, R.G., and S.N. HOOPER. 1968. Examination of isoprenoid fatty acids as distinguishing characteristics of specific marine oils with particular reference to whale oils. Comp. Biochem. Physiol. 24: 549-565.

ACKMAN, R.G., and S.N. HOOPER. 1974. Long-chain monoethylenic and other fatty acids in heart, liver, and blubber lipids of two harbour seals (Phoca vitulina) and one grey seal (Halichoerus grypus). J. Fish. Res. Board Can. 31: 333-341.

ACKMAN, R.G., S.N. HOOPER, C.A. EATON, J.C. SIPOS, and W. FRIAR. 1974. Can a food chain be detected with fatty acids consideration of the depot and certain organ fats of whales, seals and turtles. J. Am. Oil Chem. Soc. 51: 516A.

ACKMAN, R.G., S.N. HOOPER, and J. HINGLEY. 1972b. Harbor seal, Phoca vitulina concolor. Comparative details of fatty acids in lung and heart phospholipids and triglycerides. Can. J. Biochem. 50: 833-838.

ACKMAN, R.G., and P.M. JANGAARD. 1963. Identification of the major polyunsaturated C_{18} acids of marine oils by GLC separation factors on normal and organosilicone polyesters. J. Am. Oil Chem. Soc. 40: 744-745.

ACKMAN, R.G., and P.M. JANGAARD. 1965. The grey (Atlantic) seal; fatty acid composition of the blubber from a lactating female. Can. J. Biochem. 43: 251-255.

ACKMAN, R.G., P.J. KE, W.A. MACCALLUM, and D.R. ADAMS. 1969. Newfoundland capelin lipids: fatty acid composition and alterations during frozen storage. J. Fish. Res. Board Can. 26: 2037-2060.

ACKMAN, R.G., and J.C. SIPOS. 1965. Isolation of the saturated fatty acids of some marine lipids with particular reference to normal odd-numbered fatty acids and branched-chain fatty acids. Comp. Biochem. Physiol. 15: 445-456.

ACKMAN, R.G., J.C. SIPOS, C.A. EATON, B.L. HILAMAN, and C. LITCHFIELD. 1973. Molecular species of wax esters in jaw fat of Atlantic bottlenose dolphin, Tursiops truncatus. Lipids 8: 661-667.

ACKMAN, R.G., J.C. SIPOS, and C.S. TOCHER. 1967. Some linear, iso, anteiso and multiple-branched fatty acids of marine origin: analysis of packed and open-tubular gas-liquid chromatographic columns with particular reference to pristanic and phytanic acids. J. Fish. Res. Board Can. 24: 635-650.

ADAMS, N.H., and B.I. OSBURN. 1973. Serum proteins in the northern elephant seal (Mirounga angustirostris). Am. J. Vet. Res. 34: 1071-1072.

ADDISON, E.M., and G.B. KOLENOSKY. 1979. Use of ketamine hydrochloride and xylazine hydrochloride to immobilize black bears (Ursus americanus). J. Wildl. Dis. 15: 253-258.

ADDISON, R.F. 1973. Organochlorine residues in Canadian Arctic marine mammals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mammal Comm. 1973/N:4.

ADDISON, R.F. 1976. Organochlorine compounds in aquatic organisms, their distribution, transport and physiological significance, p. 127-143. In A.P.M. Lockwood (ed.) Effects of pollutants on aquatic organisms, Vol. 2. Society for Experimental Biology, Seminar Series. Cambridge University Press, New York.

ADDISON, R.F. 1982. Organochlorine compounds and marine lipids. Prog. Lipid Res. 21: 47-71.

ADDISON, R.F., and P.F. BRODIE. 1973. Occurrence of DDT residues in beluga whales (Delphinapterus leucas) from the Mackenzie Delta. J. Fish. Res. Board Can. 30: 1733-1736.

ADDISON, R.F., and P.F. BRODIE. 1977. Organochlorine residues in maternal blubber, milk and pup blubber from grey seals (Halichoerus grypus) from Sable Island, Nova Scotia. J. Fish. Res. Board Can. 34: 937-941.

ADDISON, R.F., S.R. KERR, J. DALE, and D.E. SERGEANT. 1973. Variation of organochlorine residue levels with age in Gulf of St. Lawrence harp seals (Pagophilus groenlandicus). J. Fish. Res. Board Can. 30: 595-600.

ADDISON, R.F., and T.G. SMITH. 1974. Organochlorine residue levels in Arctic ringed seals. Variation with age and sex. Oikos 25: 335-337.

ADDISON, R.F., M.E. ZINCK, and R.G. ACKMAN. 1972. Residues of organochlorine pesticides and polychlorinated biphenyls in some commercially produced Canadian marine oils. J. Fish. Res. Board Can. 29: 349-355.

ADOLPH, E.F. 1951. Some differences in responses to low temperatures between warm-blooded and cold-blooded vertebrates. Am. J. Physiol. 166: 92-103.

AGAWA, T., J. TSUJIMOTO, and S. KOMORI. 1956. Preparation of high-potency vitamin A from natural vitamin oils. Kogyo Kagaku Zasshi 59: 460-463.

AGUILAR, A. 1983. Organochlorine pollution in sperm whales, Physeter macrocephalus, from temperate waters of western north Atlantic. Mar. Pollut. Bull. 14: 349-352.

AGUILAR, A., and L. JOVER. 1982. DDT and PCB residues in fin whale, Balaenoptera physalus, of the north Atlantic. Int. Whaling Comm. Rep. Comm. 32: 299-301.

AINLEY, D.G., H.R. HUBER, and K.M. BAILEY. 1982. Population fluctuations of California sea lions, Zalophus californianus, and the Pacific whiting, Merluccius productus, fishery off central California, U.S.A. U.S. Natl Mar. Fish. Serv. Fish. Bull. 80: 253-258.

AITKEN, R.J. 1979. Tubal and uterine secretions: the possibility for contraceptive attack. J. Reprod. Fertil. 55: 247-254.

AKIYA, T., T. MASUHARA, and S. HAYAKAWA. 1950. The nutritive value of ethyl esters of the mixed fatty acids of spermaceti oil. Rep. Food Research Inst. (Jpn) 3: 167-172; J. Jpn. Soc. Food Nutr. 3: 153-155 (1951).

AKIYA, S., S. TESHIMA, and Y. ISHIKAWA. 1949. Enzymes in the digestive organs of a whale. Symposia on Enzyme Chemistry (Japan) 3: 43-52.

AKULIN, V.N., and T.A. PERVUNINSKAYA. 1972. Composition of fatty acids of Antarctic seals. Issled. Tekhnol. Rybn. Prod. No. 3: 36-39. Ref. Zh. Khim. 1973, Abstr. No. 24R471. (Can. Fish. Mar. Serv. Transl. Ser. 3429, 1975. 3 p.)

ALCORN, D.J., L.E. FANCHER, and J.G. MOSS. 1980. Harbor seal and fish populations - before and after a sewage spill in south San Francisco Bay. Calif. Fish Game 66: 238-240.

ALIMOVA, E.K., and N.D. MOISEENKO. 1963. Isolation of high molecular-weight isomeric fatty acids from cow-milk butter and whale fat with urea. Vopr. Med. Khim. 9: 383-386. (In Russian; English summary)

ALLDEN, W.G., R.M. SANGSTER, and M.D. JONES. 1954. Condensed whale solubles. The evaluation of this by-product of the whaling industry when fed as the animal protein supplement to the rations of pigs and poultry. J. Agric. (Victoria) 58: 158-161.

ALLEN, R.L. 1975. A life table for harp seals in the northwest Atlantic. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 303-311.

ALLENDORF, F.W., F.B. CHRISTIANSEN, T. DOBSON, F. EANES, and O. FRYDENBERG. 1979. Elec-

trophoretic variation in large mammals. I. The polar bear, Thalarctos maritimus. Hereditas 91: 19-22.

ALZIEU, C., and R. DUGUY. 1978. Teneurs en composes organocnlores chez les cetaces et pinnipedes frequentant les cotes francaises. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1977/N:8.

ALZIEU, C., and R. DUGUY. 1979. Organochlorine compounds in cetaceans and Pinnipedia living along the French coasts. Oceanol. Acta 2: 107-120.

AMAN, A.C. 1973. Gonadotropic factors affecting the onset of reproductive maturity in the female fur seal (Callorhinus ursinus). Ph.D. Thesis, University of British Columbia, Vancouver, BC. (Diss. Abstr. Int. 34(6): 3003-B)

AMAN, A.C. 1975. Gonadotrophic factors affecting the onset of reproductive maturity in the female fur seal, Callorhinus ursinus, p. 27. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st Conference on biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

AMERICAN SOCIETY OF MAMMOLOGISTS COMMITTEE ON MARINE MAMMALS. 1967. Standard measurements of seals. J. Mammal. 48: 455-462.

AMOROSO, E.C. 1952. Placentation, p. 127-311. In A.S. Parks (ed.) Marshall's physiology of reproduction. Longmans, Green and Co., London.

AMOROSO, E.C., G.H. BOURNE, R.J. HARRISON, L.H. MATTHEWS, I.W. ROWLANDS, and J.C. SLOPER. 1965. Reproductive and endocrine organs of foetal, newborn and adult seals. J. Zool. (Lond.) 147: 430-486.

AMOROSO, E.C., A. GOFFIN, G. HALLEY, L.H. MATTHEWS, and D.J. MATTHEWS. 1951b. Lactation in the grey seal. J. Physiol. 113: 4P-5P.

AMOROSO, E.C., R.J. HARRISON, L.H. MATTHEWS, and I.W. ROWLANDS. 1951a. Reproductive organs of near-term and new-born seals. Nature (Lond.) 168: 771-772.

AMOROSO, E.C., and L.H. MATTHEWS. 1951. The growth of the grey seal (Halichoerus grypus Fabricius) from birth to weaning. J. Anat. 85: 427-428.

AMOROSO, E.C., and L.H. MATTHEWS. 1952a. Reproduction and lactation in the seal, p. 193-203. In International congress on the physiology and pathology of animal reproduction and artificial insemination. Report of the 2nd international congress on the physiology and pathology of animal reproduction and artificial insemination. Vol. 1.

AMOROSO, E.C., and L.H. MATTHEWS. 1952b. Reproduction and lactation in the seal. Anim. Breed. Abstr. (December) No. 1772. Abstract.

AMUNDIN, M., and S.H. ANDERSEN. 1983. Bony nares air pressure and nasal plug muscle activity during click production in the harbour porpoise, Phocoena phocoena, and the bottle-nosed dolphin, Tursiops truncatus. J. Exp. Biol. 105: 275-282.

ANANTHAKRISHNAN, R., and E.M. McDERMID. 1971. Two possible genetic variants of red cell acid phosphatase in seals. Anim. Blood Groups Biochem. Genet. 2: 113-114.

ANAS, R.E. 1970. Mercury found in fur seals. Commer. Fish. Rev. 32(12): 3.

ANAS, R.E. 1971. Organochlorine pesticides in northern fur seals, California sea lions and birds, 1968-69. U.S. Natl Mar. Fish. Serv. Spec. Sci. Rep. Fish. 628: 32-35.

ANAS, R.E. 1973. Mercury in fur seals, p. 91-96. In D.R. Buhler (ed.) Symposium: mercury in the western environment. Proceedings of a workshop, Portland, Oregon, 1971. Oregon State University Press, Corvallis, OR.

ANAS, R.E. 1974a. Heavy metals in the newborn fur seal, Callorhinus ursinus and harbour seal, Phoca vitulina richardsi. U.S. Natl Mar. Fish. Serv. Fish. Bull. 72: 133-137.

ANAS, R.E. 1974b. DDT plus PCB's in blubber of harbour seals. Pestic. Monit. J. 8: 12-14.

ANAS, R.E., and A.J. WILSON, Jr. 1970a. Organochlorine pesticides in nursing fur seal pups. Pestic. Monit. J. 4: 114-116.

ANAS, R.E., and A.J. WILSON, Jr. 1970b. Organochlorine pesticides in fur seals. Pestic. Monit. J. 3: 198-200.

ANAS, R.E. and D.D. WORLUND. 1975. Comparison between two methods of subsampling blubber of northern fur seals for total DDT plus PCB's (polychlorinated bipnenyls). Pestic. Monit. J. 8: 261-262.

ANBINDER, E.M. 1975. Karyological similarity of sea lions and fur seals (Pinnipedia: Otariidae). Biol. Morya (Vladivosk.) 1975(4): 73-75. (In Russian)

ANBINDER, E.M. 1975a. Karyotypes and taxonomy of true seals. Biol. Morya (Vladivosk.) 1975: 69-72. (In Russian)

ANDERS, G., A. HALLER, D. FOOTE, and P. COVE. 1967. The east coast of Baffin Island: an area economic survey. Department of Indian Affairs and Northern Development, Ottawa, ON. 196 p. (A.E.S.R. 66/4.)

ANDERSEN, H.T. (ed.) 1969. The biology of marine mammals. Academic Press, New York. 511 p.

ANDERSEN, H.T., E.N. CHRISTIANSEN, H.J. GRAV, and J.I. PEDERSEN. 1970. Thermogenesis of brown adipose tissue reflected in mito-

chondrial respiratory control. Acta Physiol. Scand. 80: 1-10.

ANDERSEN, S. 1966. The physiological range of formed elements on the blood of the harbour porpoise, Phocoena phocoena. Nord. Veterinaermed. 18: 51-65.

ANDERSEN, S. 1968. Physiological ranges of blood chemical parameters in captive harbor porpoise, Phocoena phocoena. Nord. Veterinaermed. 20: 267-278.

ANDERSEN, S.H., and E. NIELSEN. 1983. Exchange of water between the harbour porpoise, Phocoena phocoena, and the environment. Experientia (Basel) 39: 52-53.

ANDERSON, S.S., J.R. BAKER, J.H. PRIME, and A. BAIRD. 1979. Mortality in grey seal pups: incidence and causes. J. Zool. (Lond.) 189: 407-417.

ANDERSON, R.M. 1946. Catalogue of Canadian recent mammals. Natl Mus. Can. Bull. 102 (Biol. Ser. 31): 1-238.

ANDO, K., M. MORI, I. KATO, K. YUSA, and K. GODA. 1979. General composition and chemical properties of main components of Yeso brown bear (Ursus arctos yesoensis) milk. J. Coll. Dairy Nat. Sci. (Ebetsu) 8: 9-21.

ANDRÉ, E. 1947. Contribution to the study of the oil of the dolphins. J. Rech. Cent. Natl Rech. Sci. Lab. Bellevue (Paris) 1947: 65-70.

ANDRÉ, E., and H. CANAL. 1926. Sur l'huile de Mesoplodon bidens. C.R. Hebd. Seances Acad. Sci. 183: 1063-1065.

ANDRÉ, E., and T. FRANCOIS. 1926. Contribution a l'étude des huiles d'animaux marins. Recherches sur l'huile de cachalot et le spermaceti. C.R. Hebd. Seances Acad. Sci. 182: 497-499.

ANDRE, E., and M. MAILLE. 1947. Comparative study of saponification value determinations using solutions of potassium hydroxide in methanol, ethanol, propanol and butanol. Bull. Soc. Chim. Fr. 1947: 215-217.

ANDREEV, F.V. 1978. Structural and functional properties of the dolphin and pinniped eye, p. 116-133. In V.E. Sokolov and A.V. Iablokov (ed.) Advances in Pinniped and Cetacean research. Nauka, Moscow. (In Russian)

ANDRES, S.F. 1972. Role of the heme group and certain histidine residues in the conformation and immunochemistry of sperm whale myoglobins. Ph.D. Thesis, Wayne State University. 132 p. (Diss. Abstr. Int. 33(11), 1973: 5184-B. University Microfilms Order No. 73-12, 471)

ANONYMOUS. 1966. Whale catch and oil production, 1965/66. Commer. Fish. Rev. 28(1): 39.

ANONYMOUS. 1972. Biology of Bering Sea harbour seals; toxicology, biochemical analysis of species and populations, adaptation of their environment. Cruise of the U.S. Coast Guard Cutter "Glacier." Alaska Univ. Sea Grant Program Rep. 72-1: 20-24.

ANONYMOUS. 1973. Polychlorinated biphenyls in polar bears and seals. Biol. Conserv. 5: 57.

ANONYMOUS. 1977. Results of heavy metal and organohalogen investigations on the seal (Phoca vitulina) of the North Sea coast of Germany. Inf. Fischwirtsch. Aust. 24: 18-20. (In German)

ANONYMOUS. 1982. Report on the meeting of the ad hoc working group on assessment of harp and hooded seals in the northwest Atlantic. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. C.M. 1982/No. 22.

ANTEZANA, J.T. 1970. Euphausiids of the Chilean Coast, their role in marine economy. Rev. Biol. Mar. 14: 19-27.

ANTONELIS, G.A., C.H. FISCUS, and R.L. DE LONG. 1981. Late spring and summer prey of California sea lions, Zalophus californianus, near San Miguel Island, California 1978-1979, p. 3. In Symposium: biology of marine mammals, Abstracts. 4th Biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

ARIMA, S., and K. NAGAKURA. 1979. Mercury and selenium of Odontoceti. Bull. Jpn. Soc. Sci. Fish. 45: 623-626.

ARNASON, U. 1977. The relationship between the four principal pinniped karyotypes. Hereditas 87: 227-242.

ARNASON, U. 1981. Localization of nucleolar organizing regions in pinniped karyotypes. Hereditas 94: 29-34.

ARNASON, U. 1982. Using killer whale restriction fragment as a probe. Hereditas 97: 47-49.

ARNASON, U., A. LIMA DE FARIA, H. GRANSTROM, and M. ISAKSSON. 1977. Analysis of cetacean DNA. II. Localization of 18S and 28S ribosomal RNA cistrons in a heavy DNA component. Hereditas 87: 67-75.

ARNASON, U., R. PERO, and A. LIMA DE FARIA. 1976. Analysis of cetacean DNA. I. Appearance of a heavy DNA component after banding in cesium chloride gradients. Hereditas 84: 221-223.

ARNASON, U., I.F. PURDOM, and K.W. JONES. 1978. Conservation and chromosonal localization of DNA satellites in balaenopterid whales. Chromosoma 66: 141-159.

ARNASON, U., I.F. PURDOM, and K.W. JONES. 1982. Cetacean molecules hybridization using balaenopterid satellite DNA complementary RNA as probes. Hereditas 97: 33-36.

ARNDT, D.P. 1973. DDT and PCB levels in three Washington State harbor seal (Phoca vitulina richardii) populations. M.Sc. Thesis, University of Washington, Seattle, WA.

ARNOLD, P.W. 1972. Predation on harbour porpoise, Phocoena phocoena, by a white shark, Carcharodon carcharias. J. Fish. Res. Board Can. 29: 1213-1214.

ARSENIEV, V.A. 1940. Food habits of the ribbon seal Histriophoca fasciata Zimm. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 20: 121-127. (In Russian)

ARVY, L. 1973. Les glandes surrenales des Mammiferes. Part 5, Vol. 1: 743967. In P.P. Grasse (ed.) Traite de zoologie: anatomie, systematique biologie, Vol. 16, Mammiferes, splanchnologie. Masson et Cie, Paris.

ARVY, L., and G. PILLERI. 1983. Four centuries of observations on the bottle-nosed whale, the sperm whale, and the killer whale. Invest. Cetacea. 15(Suppl.): 1-265.

ASHWELL-ERICKSON, S.M., and R.W. ELSNER. 1981. The energy cost of free existence for Bering Sea harbour and spotted seals, p. 869-900. In D.W. Hood and J.A. Calder (ed.) The eastern Bering Sea shelf: oceanography and resources, Vol. 2. Office of Marine Pollution Assessment, National Oceanic and Atmospheric Administration, Seattle, WA.

ASHWELL-ERICKSON, S.M., and R.W. ELSNER. 1981a. The energy cost of free existence for Bering Sea harbor and spotted seals, p. 30. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

ASHWELL-ERICKSON, S.M., R.W. ELSNER, and D. WARTZOK. 1979. Metabolism and nutrition of Bering Sea harbor and spotted seals, p. 651-665. In Symposium: Alaska fisheries: 200 years and 200 miles of change. Proc. Alaska Sci. Conf. 29, 1978. (Univ. Alaska Sea Grant Rep. 79-6)

ASHWELL-ERICKSON, S.M., F.H. FAY, R.W. ELSNER, and D. WARTZOK. 1981a. Metabolic and nutritional aspects of molting in Bering Sea harbor and spotted seals, p. 30. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

ASHWELL-ERICKSON, S.M., F.H. FAY, R.W. ELSNER, and D. WARTZOK. 1981. Nutritional and hormonal aspects of molting in Bering Sea harbor seals, Phoca vitulina richardsi, and spotted seals, Phoca largha. Proc. Alaska Sci. Conf. 32: 101-102.

ASHWORTH, V.S., G.D. RAMAIAH, and M.C. KEYES. 1966. Species difference in the composition of milk with special reference to the northern fur seal. J. Dairy Sci. 49: 1206-1211.

ASPER, E.D. 1975. Techniques of live capture of smaller Cetacea. J. Fish. Res. Board Can. 32: 1191-1196.

ATANASOV, B.P. 1966. Physicochemical properties of metmyoglobin from Delphinus delphis. Biokhimiya 31: 59-62. (In Russian)

ATASANOV, B.P., and S. MITOVA. 1970. Reversibility of thermal denaturation of Delphinus delphis ferrimyoglobin derivatives. Biochim. Biophys. Acta 214: 69-82.

ATASSI, M.Z. 1967. Immunochemistry of sperm whale myoglobins prepared with various modified porphyrins and metalloporphyrins. Biochem. J. 103: 29-35.

ATASSI, M.Z., and B.J. SAPLIN. 1966. Myoglobin from the finback whale (Balaenoptera physalus). Preparation, physicochemical and immunochemical characterization, differentiation from sperm whale myoglobin, amino acid, composition and end terminal analyses. Biochem. J. 98: 82-93.

ATASSI, M.Z., H.F. SCHMITZ, and H. ATASSI. 1983. Production of monoclonal antibodies with preselected submolecular binding specificities to the 5 antigenic sites of sperm whale myoglobin. Fed. Proc. 42(3): Abstr. 813.

ATASSI, M.Z., S.S. TWINING, H. LEHMANN, and C.S. DAVID. 1981. Genetic control of the immune response to myoglobin. V. Analysis of the cross-reactivity of 12 myoglobins with sperm whale myoglobin antisera of inbred mouse strains in terms of substitutions of antigenic sites and in the environmental residues of sites. Immunol. Commun. 10: 359-365.

AU, W.W.L., and C.W. TURL. 1983. Target detection in reverberation by an echo locating Atlantic bottle-nosed dolphin, Tursiops truncatus. J. Acoust. Soc. Am. 73: 1676-1681.

AUCAMP, P.J., J.L. HENRY, and G.H. STANDER. 1971. Pesticide residues on South African marine animals. Mar. Pollut. Bull. 2: 190-191.

AUGUSTEYN, R.C., M.A. MCDOWALL, E.C. WEBB, and B. ZERNER. 1972. Preliminary structure of cytochrome C from the elephant seal, Mirounga leonina. Biochim. Biophys. Acta 257: 264-272.

AURIOLES, D., F. SINSEL, C. FOX, E. ALVARADO, and O. MARAVILLA. 1983. Winter migration of subadult male California sea lions (Zalophus californianus) in the southern part of Baja California. J. Mammal. 64: 513-518.

AUSTIN, J.P. 1976. Tissue distribution and plasma levels of four clinical enzymes in phocid seals. M.Sc. Thesis, University of Guelph, Guelph, ON. 84 p.

AUSTIN, T., and J.R. GERACI. 1981. Tissue sources and clinical application of four enzymes in phocid seals. Am. J. Vet. Res. 42: 834-837.

AVIGAN, J., D. STEINBERG, A. GUTMAN, C.E. MIZE, and G.W.A. MILNE. 1966. Alpha-decarboxylation, an important pathway for degradation of phytanic acid in animals. Biochem. Biophys. Res. Commun. 24: 838-844.

AZIZI, F., J.L. MANNIX, D. HOWARD, and R.A. NELSON. 1979. Effect of winter sleep on pituitary thyroid axis in American black bear. Am. J. Physiol. 237: E227-E230.

BACKHOUSE, K.M. 1964. The anaesthesia of marine mammals, p. 79-86. In O. Graham-Jones (ed.) Symposium: small animal anaesthesia. Proceedings symposium organized by British Small Animal Veterinary Association and Universities Federation for Animal Welfare, London, 1963. McMillan Co., New York.

BACKHOUSE, K.M., and H.R. HEWER. 1956. Delayed implantation in the grey seal, Halichoerus grypus (Fab.). Nature (Lond.) 178: 550.

BACKHOUSE, K.M., and H.R. HEWER. 1957. Behaviour of the grey seal (Halichoerus grypus) in the spring. Proc. Zool. Soc. Lond. 129: 450.

BADA, J.L., and L. DEEMS. 1975. Accuracy of date beyond the carbon-14 dating limit using the aspartic acid racemization reaction. Nature (Lond.) 255: 218-219.

BADA, J.L., E. MITCHELL, and B. KEMPER. 1983. Aspartic acid racemization in narwhal, Monodon monoceros, teeth. Nature (Lond.) 303: 418-420.

BAG, A.A., T.P. EGUPOV, A.P. LAVROVA, and F. RAKHMATULIN. 1938. The use of low-grade blubber and fish oils for obtaining high-grade fatty acids. Maslob.-Zhir. Deloe 5: 21-24. (In Russian)

BAGGE, P. 1975. Pesticide residues in some Baltic animals - a review of selected literature. Pure Appl. Chem. 42: 129-137.

BAILEY, B.A., R.G.H. DOWNER, and D.M. LAVIGNE. 1980. Neonatal changes in tissue levels of carbohydrate and lipid in the harp seal, Pagophilus groenlandicus. Comp. Biochem. Physiol. 67B: 179-182.

BAILEY, B.A., R.G.H. DOWNER, D.M. LAVIGNE, G. DROLET, and G.A.J. WORTHY. 1981. Changes in fatty acid composition of plasma of the harp seal, Pagophilus groenlandicus, during postweaning fast. Comp. Biochem. Physiol. 70B: 795-798.

BAILEY, B.E. 1952. Marine oils with particular reference to those of Canada. Bull. Fish. Res. Board Can. 89: 413 p.

BAILEY, K.M., and D.G. AINLEY. 1982. The dynamics of California sea lion, Zalophus californianus, predation on Pacific hake, Merluccius productus. Fish. Res. 1: 163-176.

BAKER, A.N. 1981. The southern right whale dolphin, Lissodelphis peronii, in Australian waters. Natl Mus. N. Z. Rec. 17-34.

BAKER, B.E., C.R. HARRINGTON, and A.L. SYMES. 1963. Polar bear milk. I. Gross composition and fat constitution. Can. J. Zool. 41: 1035-1039.

BAKER, B.E., V.B. HATCHER, and C.R. HARRINGTON. 1967. Polar bear milk. III. Gel electrophoretic studies of protein fractions from polar bear milk and human milk. Can. J. Zool. 45: 1205-1210.

BAKER, B.E., F.Y.Y. HUANG, and C.R. HARRINGTON. 1963a. The carbohydrate content of polar bear milk casein. Biochem. Biophys. Res. Commun. 13: 227230.

BAKER, B.E., and B.H. LAUER. 1971. Casein. X. Carbohydrate content of casein prepared from the milks of different species. Can. J. Zool. 49: 551-554.

BAKER, B.E., C.H. NEILSON, and E.R. SAMUELS. 1970. Strontium-90 and cesium-137 in human and other milks collected in Alaska. J. Dairy Sci. 53: 241-244.

BAKER, E.A., and J.C. NEVENZEL. 1971. Wax esters lipases of marine animals. J. Am. Oil Chem. Soc. 48: 85A.

BAKER, J.R., S.S. ANDERSON, J.H. PRIMER, and A. BAIRD. 1980. The pathology of the grey seal (Halichoerus grypus). I. Publications. Br. Vet. J. 136: 401-412.

BAKER, J.R., A.M. JONES, T.P. JONES, and H.C. WATSON. 1981. Otter, Lutra lautra L., mortality and marine oil pollution. Biol. Conserv. 20: 311-321.

BAKER, R.C., F. WILKE, and C. H. BALTZO. 1970a. The northern fur seal. U.S. Fish Wildl. Serv. Circ. 336: 19 p.

BALDRIDGE, A. 1972. Killer whales attack and eat a gray whale. J. Mammal. 53: 898-900.

BALLSCHMITER, K., and M. ZELL. 1980. Baseline studies of the global pollution. Int. J. Environ. Anal. Chem. 8: 15-35.

BALTES, W. 1968. Composition of meat extracts of cattle, sheep, whale and sperm whale. Z. Lebensm. Unters. Forsch. 65: 319-325. (In German)

BALUDA, M.C., D.D. KULU, and R.S. SPARKES. 1972. Cetacean hemoglobins. Electrophoretic findings of nine species. Comp. Biochem. Physiol. 41B: 647-653.

BANFIELD, A.W.F. 1974. The mammals of Canada. University of Toronto Press, Toronto, ON. 438 p.

BANG, H.O., and J. DYERBERG. 1972. Plasma lipids and lipoproteins in Greenlandic west coast Eskimos. Acta Med. Scand. 192: 85-94.

BANG, H.O., J. DYERBERG, and N. HJØRNE. 1976. The composition of food consumed by Greenland Eskimos. Acta Med. Scand. 200: 69-73.

BANG, H.O., J. DYERBERG, and A.B. NIELSEN. 1971. Plasma lipid and lipoprotein pattern in Greenlandic west coast Eskimos. Lancet 1: 1143-1146.

BANG, H.O., J. DYERBERG, and H.M. SINCLAIR. 1980. The composition of the Eskimo food in northwestern Greenland. Am. J. Clin. Nutr. 33: 2657-2661.

BANNISTER, J.L., and A.C. BAKER. 1967. Observations on food and feeding of baleen whales at Durban. Norsk Hvalfangsttid. 56: 78-82.

BAPTIST, N.G. 1941. Analysis of the oil of Ziphius cavirostris (goose-headed whale). Curr. Sci. (Bangalore) 10: 331.

BARNARD, J.L. 1959. Epipelagic and under ice amphipods of central Arctic Ocean. Geophysical Research Paper 63.1: 115-152.

BARR, N., and L. BARR. 1972. An observation of killer whale predation on a Dall porpoise. Can. Field-Nat. 86: 170-171.

BARTHOLOMEW, G.A. 1970. A model for the evolution of pinniped polygyny. Evolution 24: 546-559.

BARTHOLEMEW, G.A., and R.A. BOOLOOTIAN. 1960. Numbers and population structure of the pinnipeds on the California Channel Islands. J. Mammal. 41: 366-375.

BARTLETT, A.D. 1865. On the habits of the southern sea lion. Ann. Mag. Nat. Hist. Ser. 3. 15: 496.

BARTLETT, A.D. 1867. Remarks on the food of the walrus. Proc. Zool. Soc. Lond. 1867: 114.

BARTLETT, C.A., and D.S. MOULDER. 1976. A bibliography on marine and estuarine pesticide pollution. Marine Biological Association of the United Kingdom, Plymouth.

BARTLETT, D.J., and B.J. WEIR. 1974. Circulating levels of oestradiol-17β during early pregnancy in the Alaskan fur seal showing an oestrogen surge preceding implantation. J. Reprod. Fertil. 37: 425-428.

BASLOW, M.H. 1965. Neurosine, its identification with N-acetyl-L-histidine and distribution in aquatic vertebrates. Zoologica (N.Y.) 50: 63-66.

BASTEN, A., J.F.A.P. MILLER, R. ABRAHAM, J. GAMBLE, and E. CHIA. 1976. Receptor for antibody on B lymphocytes. III. Relation of the receptor to immunoglobulin and Ia determinants. Int. Arch. Allergy Appl. Immunol. 50: 309-321.

BAUER, K.H., and W. NETH. 1942. Seal oil. Chem. Umschau Geb. Fette Oele Wachse Harze 31: 5-7.

BEAL, J.R., and P.T. CARDEILHAC. 1979. Ceruloplasmin from the Pacific pilot whale. Fed. Proc. 38: 1062.

BEAMISH, P.C. 1970. Biological sonar of diving mammals, an analytical model, p. 1-4. In Symposium: Biological sonar and diving mammals, Proceeding of the 7th Annual Conference on biological sonar and diving mammals, October 23-24, 1970, Standford Research Institute, Biological Sonar Laboratory, Menlo Park, CA.

BEARE-ROGERS, J.L. 1969. Reaction of lipoxidase on polyenoic acids in marine oils. Lipids 4: 441-443.

BEARE-ROGERS, J.L. 1977. Docosenoic acids in dietary fats. Prog. Chem. Fats Other Lipids 15: 29-56.

BEARE-ROGERS, J.L., E.A. NERA, and B.M. CRAIG. 1972. Cardiac lipids in cats and gerbils fed oils containing C_{22} fatty acids. Lipids 7: 544-552.

BEAUBIER, P.H., M.J. BRADLEY, and J.G. VESTEY. 1970. Human ecological studies - Igloowik, N.W.T.: Final Report submitted to I.B.P. Human Adaptability Project. McGill Department of Geography, Montreal, PQ. 180 p.

BECHERVAISE, J. 1962. Antarctic Wildlife. 8. The leopard seal is not for branding. Victorian Nat. 79: 237-243.

BECK, A.B. 1956. The copper content of the liver and blood of some vertebrates. Aust. J. Zool. 4: 1-18.

BECK, A.B. 1961. The liver copper levels of fetal and newly born marsupials and whales. Aust. J. Sci. 24: 245-246.

BECK, B., and T.G. SMITH. 1976. Seal finger - an unsolved medical problem in Canada. Can. Fish. Mar. Serv. Tech. Rep. 625: 6 p.

BEEMAN, L.E., M.R. PELTON, and L.C. MARCUM. 1974. Use of M99 Etorphine for immobilizing black bears. J. Wildl. Manage. 38: 568-569.

BEHRISCH, H.W. 1973. Molecular mechanisms of temperature adaptation in Arctic ectotherms and heterotherms, p. 137. In W. Wieser (ed.) Effects of temperature on ecothermic organisms: ecological implications and mechanisms of compensation. Springer Verlag, New York.

BEHRISCH, H.W., and R.W. ELSNER. 1975. Fructose diphosphatase from kidney and liver

of a diving mammal, the harbor seal (Abstract). Physiologist 18: 135.

BEHRISCH, H.W., and R.W. ELSNER. 1980a. Molecular adaptations to the diving habit: fructose 1,6-bisphosphatase of a diver, the harbor seal. Comp. Biochem. Physiol. 66B: 123-127.

BEHRISCH, H.W., and R. ELSNER. 1980b. Molecular adaptations to the diving habitat: possible role of glycerol in the ischemic seal, Phoca vitulina richardsi, kidney. Comp. Biochem. Physiol. 66B: 403-408.

BEHRISCH, H.W., and J.A. PERCY. 1974. Temperature and the regulation of enzyme activity in homeo- and heterothermic tissues of Arctic marine mammals. Regulatory properties of 1,6-phosphogluconate dehydrogenase from adipose tissue of the spotted seal, Phoca vitulina. Comp. Biochem. Physiol. 47B: 437-443.

BELKOVITCH, V.M. 1964. Structure of the cutaneous integument of certain pinnipeds, p. 5-47. In S.E. Kleinenberg (ed.) Morfologicheskie osobennosti vodnykh mlekopitayaushchie. [Morphological peculiarities of marine mammals]. Nauka, Moscow. (In Russian)

BELKOVITCH, V.M. 1965. Particular features of thermoregulation in aquatic environment (from the example of mammals). Bionika 1965: 215-219. (In Russian)

BELOPOLSKII, M.P. 1935. The oils of the white polar bear and brown Okhotsk bears. Vestn. Dal'nevost. Fil. Akad. Nauk SSSR 11: 51-55. (In Russian)

BELOV, L.N. 1969. Microstructure of the lactating gland in Pagophilus groenlandicus and Cystophora cristata, p. 149-153. In Morskii mlekopitayushchie (4th All-Union Conf. Study Mar. Mamm., Kaliningrad, 16-18 Sept., 1969). Moscow: Akad. Nauk SSSR Zool. Inst., Inst. Evol. Morfol. Ekol. Zhivotn. Inst. Biol. Razrit., Minist. Rybn. Khoz. SSSR. (In Russian)

BENJAMIN, T., and I. CHRISTIANSEN. 1978. The natural history of the bottle-nosed whale, Hyperoodon ampullatus, p. 143-164. In H.E. Winn and B.L. Olla (ed.) Behavior of marine mammals: current perspectives in research, Vol. 3. Cetaceans. Plenum Press, New York.

BENJAMINSEN, T. 1975. Provisional review of factors relating to the evaluation of seal meat as raw material for food production. Fiskeridir. Havforsk. 24: 1-12. (In Danish)

BENNICH, H., B. JOHANSSON, and O. MELLANDER. 1957. Enzymic hydrolysis of casein from different species. Acta Soc. Med. Upsal. 62: 67-76.

BEN SHAUL, D. 1962. The composition of the milk of wild animals. Int. Zoo Yearb. 4: 333-342.

BENTLEY, P.J. 1963. Composition of the urine of the fasting humpback whale. Comp. Biochem. Physiol. 10: 257-259.

BERGAN, J.G., and R.R. BELL. 1978. Nutrition studies: biochemical assessment of nutritional status (of Alaskan Eskimos), p. 157-161. In P.L. Jameson et al. (ed.) Eskimos Northwest Alaska. Dowden, Hutchinson & Ross Inc., Stroudsburg, PA.

BERGMAN, A. 1977. Synthesis of methanisulfonyl derivatives of p,p-DDE present in seals from the Baltic Sea. Acta Chem. Scand., Ser. B. Org. Chem. Biochem. 31: 90-91.

BERGMAN, A., M. OLSSON, and L. REUTERGARDH. 1981. Lowered reproduction rate in seal population and PCB. A discussion of comparability of results and a presentation of some data from research on the Baltic seals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1981/N:10.

BERKOWER, I., G.K. BUCKENMEYER, F.R.N. GURD, and J.A. BERZOFSKY. 1982. A possible immunodominant epitope recognzied by murine T lymphocytes immune to different myoglobins. Proc. Natl Acad. Sci. U.S.A. 79: 47234727.

BERKOWER, I., F.R.N. GURD, and J. BERZOFSKY. 1981. H-2 linked fine specificity of myoglobin primed T cells. Fed. Proc. 40(3 Part 2): 998. (Abstract)

BERN, H.A., C.C. DE ROOS. 1960. The corticosteroids of the California sea lion (Zalophus californianus) adrenal incubated in vitro. Anat. Rec. 138: 334.

BERNER, K. 1952. Recovering vitamins from whale liver. Norwegian Patent 79, 658, Feb. 4, 1952.

BERNHARD, K., P. LESCH, and H.-R. GREUB. 1969. Contribution to the characterization of the lipids from the lenses of some mammals. Helv. Chim. Acta 52: 801-806.

BERNSTEIN, J., P. BURRILL, and N. KRETCHMER. 1981. Disaccharidase-deficient animals have normal ultrastructure of intestinal brush border membranes. Cell Tissue Res. 220(3): 555-559.

BERTRAM, G. 1940. The biology of the Weddell and crabeater seals: with a study of the comparative behavior of the Pinnipedia. British Graham Land Expedition (1934-1937) Scientific Reports 1: 1-139.

BERZIN, A.A. 1972. The sperm whale. Keter Press, Israel. 20 p.

BERZOFSKY, J.A., G.K. BUCKENMEYER, G. HICKS, F.R.N. GURD, R.J. FELDMANN, and J. MINNA. 1982. Topographic antigenic determinants recognized by monoclonal antibodies to sperm whale myoglobin. J. Biol. Chem. 257: 3189-3198.

BEST, P.B. 1969. The sperm whale (Physeter catodon) off the west coast of South

Africa. 4. Distribution and movements. Invest. Rep. Div. Sea Fish. S. Afr. 78: 1-12.

BEST, P.B. 1978. Social organization in sperm whales, Physeter macrocephalus, p. 227-289. In H.E. Winn and B.L. Olla (ed.) Behavior of marine animals: current perspectives in research. Vol. 3. Cetaceans. Plenum Press, New York.

BEST, P.B. 1982. Seasonal abundance, feeding, reproduction, age and growth in minke whales off Durban (with incidental observations from the Antarctic). Int. Whal. Comm. Rep. Comm. 33: 759-786.

BEST, R.C. 1975. Aspects of polar bear (Ursus maritimus Phipps) nutrition, p. 109 (225A). In American Society of Mammalogists, Abstracts of technical papers from the 55th annual meeting, University of Montana, Missoula, 16-19 June, 1975.

BEST, R.C. 1976. Ecological energetics of the polar bear (Ursus maritimus, Phipps, 1774). M.Sc. Thesis, University of Guelph, Guelph, ON. 136 p.

BEST, R.C. 1977. Ecological aspects of polar bear nutrition, p. 203-211. In R.L. Phillips and C. Jonkel (ed.) Symposium: Predator symposium, Proceedings of the 1975 predator symposium and Proceedings of the 55th annual meeting of the American Society of Mammalogy, June 16-19, 1975, University of Montana, Missoula, MT, University of Montana Forest Conservation and Experimental Station, Missoula.

BEST, R.C., and H.D. FISHER. 1974. Seasonal breeding of narwhal (Monodon monoceros L.). Can. J. Zool. 52: 429-431.

BESTER, M.N. 1975. The functional morphology of the kidney of the cape fur seal, Arctocephalus pusillus (Schreber). Madoqua, Ser. II. 4 (78-80): 69-92.

BESTER, M.N., and G.I.H. KERLEY. 1983. Rearing of twin pups to weaning by subantarctic fur seal, Arctocephalus tropicalis, female. S. Afr. J. Wildl. Res. 13: 86-88.

BETESHEVA, E.I. 1955. The feeding habits of the fin whale in the region of the Kurile water strata. Tr. Inst. Okeanol. Akad. Nauk SSSR 18: 78-85. (In Russian)

BETESHEVA, E.I. 1961. Food of commercial whales in the Kurile region. Tr. Inst. Morfol. Zhivotn. Akad. Nauk SSSR 34: 7-32. (In Russian)

BETESHEVA, E.I. 1962. The food of commercially important whales of the Kuril area. Tr. Soveshch. Ikhtiol. Kom. Akad. Nauk SSSR 12: 104-111. (In Russian)

BETESHEVA, E.I., and I.I. AKIMUSHKIN. 1955. The feeding habits of the sperm whale, Physeter catodon L., in the region of the water strata of Kurile.Tr. Inst. Okeanol. Akad. Nauk SSSR 18: 86-94. (In Russian)

BIGG, M.A. 1969. The harbour seal in British Columbia. Bull. Fish. Res. Board Can. 172: 33 p.

BIGG, M.A. 1972. Control of annual reproduction in the female harbour seal, Phoca vitulina. Ph.D. Thesis, University of British Columbia, Vancouver, BC. (Diss. Abstr. 33(6): 3036-8)

BIGG, M.A. 1973. Census of California sea lion on southern Vancouver Island, British Columbia. J. Mammal. 54: 285-287.

BIGG, M.A. 1981. Harbor seal - Phoca vitulina Linnaeus, 1758 and Phoca largha Pallas, 1811. p. 1-27. In S.H. Ridgway and R.J. Harrison (ed.) Handbook of marine mammals. Vol. 2. Seals. Academic Press, New York.

BIGG, M.A., and H.D. FISHER. 1974. The reproductive cycle of the female harbor seal off southeastern Vancouver Island, p. 329-347. In R.J. Harrison (ed.) Functional anatomy of marine mammals. Vol. 2. Academic Press, New York.

BIRCHARD, E.C., S.A.M. CONOVER, G. GREENE, and A.S. TELFORD. 1978. Assessment of the ecological effects of an oil spill in an offshore subarctic environment, p. 835-855. In Symposium: assessment of ecological impacts of oil spills. Proceedings of the conference on the assessment of ecological impacts of oil spills, Keystone, Colorado. 1978. American Institute of Biological Sciences, Washington, DC.

BIRKBY, C.S., P.W. WERTZ, and D.T. DOWNING. 1982. The polar lipids from keratinized tissues of some vertebrates. Comp. Biochem. Physiol. 73B: 239-242.

BJORNHAG, G., P.-G. KNUTSSON, and I. SPERBER. 1979. Post-natal growth and milk composition. Swed. J. Agric. Res. 9: 65-74.

BLACKER, R.W. (ed.) 1968. Symposium on the ecology of pelagic fish species in Arctic waters and adjacent seas. Rapp. P.-V. Reun. Cons. Perm. Int. Explor. Mer 158: 148 p.

BLANCHETOT, A., V. WILSON, D. WOOD, and A.J. JEFFREYS. 1983. The seal myoglobin gene; an unusually long globin gene. Nature (Lond.) 301: 732-734.

BLAXTER, K.L. 1961. Lactation and growth of young. In S.K. Kon and A.T. Cowie (ed.) Milk: the mammary gland and its secretion. Vol. 2. Academic Press, New York.

BLESSING, M.H. 1972. Concentration of myoglobin in the sea cow and porpoise. Comp. Biochem. Biophys. 41A: 475-480.

BLIGH, E.G., and F.H.J. ARMSTRONG. 1971. Marine mercury pollution in Canada. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. 1971/E: 34: 1-13.

BLIX, A.S. 1971. Creatine in diving animals - a comparative study. Comp. Biochem. Physiol. 40: 805-807.

BLIX, A.S. 1976. Metabolic consequences of submersion asphyxia in mammals and birds, p. 169-178. In R.M.S. Smellie and J.F. Pencock (ed.) Biochemical adaptation to environmental change. Biochemical Society, London. (Biochem. Soc. Symp. 41)

BLIX, A.S., T. BERG, and H.J. FYHN. 1970. Lactate dehydrogenase in a diving mammal, the common seal (Phoca vitulina vitulina L.). Int. J. Biochem. 1: 292-294.

BLIX, A.S., R. ELSNER, and J.K. KJEKSHUS. 1983. Cardiac output and its distribution through capillaries and at rioventricular shunts in diving seals. Acta Physiol. Scand. 118: 109-116.

BLIX, A.S., and S.H. FROM. 1971. Lactate dehydrogenase in diving animals - a comparative study with special reference to eider (Somateria mollissima). Comp. Biochem. Physiol. 40B: 579-584.

BLIX, A.S., and H.J. GRAV. 1979. Non-shivering thermogenesis in fur seal skeletal muscle, Abstract. p. 377. In Symposium: Alaska fisheries: 200 years and 200 miles of change. Proc. Alaska Sci. Conf. 29. (Univ. Alaska Sea Grant Rep. 79-6)

BLIX, A.S., H.J. GRAV, and R. RONALD. 1975a. Brown adipose tissue and the significance of the venous plexuses in pinnipeds. Acta Physiol. Scand. 94: 133-135.

BLIX, A.S., J.R. GRAV,and K. RONALD. 1979. Some aspects of temperature regulation in newborn harp seal pups. Am. J. Physiol. 236: R188-R197.

BLIX, A.S., R. HOL, and O. IVERSEN. 1973. Experiment for use in angiographic examination of animals during diving. Acta Physiol. Scand. 87: Expect. 3A.

BLIX, A.S., J. IVERSEN, and A. PASCHE. 1973a. On the feeding and health of young hooded seals (Cystophora cristata) and harp seals (Pagophilus groenlandicus). Norw. J. Zool. 21: 55-58.

BLIX, A.S., J.K. KJEKSHUS, I. ENGE, and A. BERGAN. 1976. Myocardial blood flow in the diving seal. Acta Physiol. Scand. 96: 277-280.

BLIX, A.S., L.K. MILLER, M.C. KEYES, H.J. GRAV, and R.W. ELSNER. 1979. Newborn northern fur seals (Callorhinus ursinus). Do they suffer from cold? Am. J. Physiol. 236: R322-R327.

BLIX, A.S., E.B. MESSELT, and H.J. GRAV. 1975. Differential effects of temperature on activity of LDH (lactate dehydrogenase) from seal and sheep skin. Acta Physiol. Scand. 95: 77-82.

BLIX, A.S., and K. RONALD. 1979. Of testicular temperature and pinnipeds, Abstract. p. 667. In Symposium: Alaska fisheries: 200 years and 200 miles of change. Proc. Alaska Sci. Conf. 29. (Univ. Alaska Sea Grant Rep. 79-6)

BLIX, A.S., and J.B. STEEN. 1979. Temperature regulation in newborn polar homeotherms. Physiol. Rev. 59: 285-304.

BLOMBERG, J. 1972. Pilot whale head oil: lipid analysis and ultrasonic studies. Göteborg Congress of the International Society for Fat Research, Abstract 223.

BLOMBERG, J. 1974. Unusual lipids. II. Head oil of the north Atlantic pilot whale, Gobicephala melaena melaena. Lipids 9: 461-470.

BLOMBERG, J. 1978. Functional aspects of odontocete head oil lipids with special reference to pilot whale head oil. Prog. Chem. Fats Other Lipids 16: 257-278.

BLOMBERG, J., and L.E. LINDHOLM. 1976. Variations in the lipid composition and sound velocity in melon from the north Atlantic pilot whale, Gobicephala malaena malaena. Lipids 11: 153-156.

BLOOD, D.A. 1977. The Beaufort Sea and the search for oil: birds and marine mammals. Institute of Ocean Sciences, Sidney, BC.

BLUM, H., J.R. BOWYER, M.A. CUSANOWITCH, A.J. WARING, and T. OHNISHI. 1983. Spin-lattice relaxation rates of iron-sulfur proteins and heme proteins affected by dysprosium complexes and temperature. Biochim. Biophys. Acta 748: 418-428.

BLUMBERG, B.S., A.C. ALLISON, and B. GARRY. 1960. The haptoglobins, hemaglobins and serum proteins of the Alaskan fur seal, ground squirrel and marmot. J. Cell. Comp. Physiol. 55: 61-71.

BLUMENKRANTZ, N., and G. ASBOE-HANSEN. 1978. Hydroxyproline to hydroxylysine molar ratio indicates collagen type. Acta Derm. Venereol. 58: 111-116.

BLUMER, M., M.M. MULLIN, and D.W. THOMAS. 1963. Pristane in zooplankton. Science (Wash. DC) 140: 974.

BLUMER, M., M.M. MULLIN, and D.W. THOMAS. 1964. Pristane in the marine environment. Helgol. Wiss. Meeresunters. 10: 187-201.

BLUMER, M., and D.W. THOMAS. 1965. "Zamene" isomeric C_{19} monoolefins from marine zooplanktons, fishes and mammals. Science (Wash. DC) 148: 370-371.

BLUMER, M., and D.W. THOMAS. 1965a. Phytadienes in zooplankton. Science (Wash. DC) 147: 1148-1149.

BOCK, H.D., J. WUENSCHE, B. HOFFMAN, K. LINKE, and C. FRUKE. 1968. Uber du Aminosauren-

zusammensetzung der Milch der Kegelrobbe, Halichoerus grypus. Fat., und des Schweinswals, Phocoena (Sic) Phocoena L. Zool. Gart. N.F. 35: 69-73.

BODROV, V.A., S.N. GREGOREV, and V.A. TVERIANOVICH. 1958. Tekhnika i tekhnologiia obrabotki morskie mlekopitayushchie kity, del'finy i lastonogie (Technique and technology of treatment of marine mammals, whales, dolphins and pinnipeds). Pishchevaya Promyshlennost, Moscow.

BOE, F., H. HOLTERMANN, S. SALVESEN, K.F. STOA, and A. SVERDRUP. 1951. Adrenocortiocotropic hormone in the whale. Nature (Lond.) 167: 280.

BOGDANOV, L.V., V.A. CHERNOIVANOV, V.I. POLYAKOVSKII, and T.I. BASHUROVA. 1977. Biochemical polymorphism of northern fur seal, Callorhinus ursinus, from the regions of the northwestern Pacific Ocean. Genetika 13: 1008-1014.

BOLOGNESI, M., E. CANNILLO, P. ASCENZI, G.M. GIACOMETTI, A. MERLI, and M. BRUNORI. 1982. Reactivity of ferric Aplysia and sperm whale myoglobins towards imidazole: x-ray and binding study. J. Mol. Biol. 158: 305-315.

BONHAM, K. 1941. Results of stomach examinations of fur seals (taken 25 April, 1941). U.S. Fish and Wildlife Service Manuscript.

BONNELL, M.L., B.J. LE BOEUF, M.O. PIERSON, D.H. DETTMAN, and G.D. FARRENS. 1978. Pinnipeds of the southern California Bight, p. 28-156. In K.S. Norris, B.J. Le Boeuf and G.L. Hunt, Jr. (ed.) Marine mammal and seabird surveys of the southern California area, 1975-1978. U.S. Government Printing Office, Washington, DC.

BONNER, W.M. 1972a. The grey seal and common seal in European waters. Oceanogr. Mar. Biol. Annu. Rev. 10: 461-508.

BONNER, W.N., and S.C.L. FOGDEN. 1971. A note on blood-typing seals. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 161: 139-141.

BONNER, W.N., and G. HICKLING. 1971. The grey seals of the Farne Islands. Report for the period October 1969 to July 1971. Trans. Nat. Hist. Soc. Northumbria 17: 141-162.

BONNER, W.N., and S. HUNTER. 1982. Predatory interactions between Antarctic fur seals, Arctocephalus gazella macaroni, penguins, Eudyptes chrysolopus, and giant petrels, Macronectes spp. Br. Antarct. Surv. Bull. 56: 75-80.

BONNER, W.N., and T.S. McCANN. 1982. Neck collars on fur seals, Arctocephalus gazella, at South Georgia south Atlantic Ocean. Br. Antarct. Surv. Bull. 57: 73-78.

BONNOT, P. 1932. Food habits of the Pacific harbour seal (Phoca richardii). Calif. Fish Game 18: 98.

BORDER, S.N. 1975. Electrophoretic analysis of hemoglobins of cetacean species. Comp. Biochem. Physiol. 51B: 209-211.

BORISOV, V.I. 1966. Some data of the serological analysis of Pagophilus groenlandicus Erxleben colonies. Zool. Zh. 45: 1890-1892. (In Russian)

BORISOV, V.I. 1969a. A comparative analysis of the serum albumins of cetaceans and some terrestrial mammals, p. 308-312. In Morsk. Mlekopitayuschie (Marine Mammals). Nauka, Moscow. (From Ref. Zh. Biol. No. 12, 1969) (In Russian)

BORISOV, V.I. 1969b. A comparative study of the antigenic properties of the serum proteins of cetaceans and other animals, p. 313-320. In Morsk. Mlekopitayuschie (Marine Mammals). Nauka, Moscow. (From Ref. Zh. Biol. No. 12, 1969) (In Russian)

BORISOV, V.I. 1969c. A serological analysis of the interrelation of cetaceans and some other animals, p. 321-326. In Morsk. Mlekopitayuschie (Marine Mammals). Nauka, Moscow (From Ref. Zh. Biol. No. 12, 1969). (In Russian)

BORISOV, V.I. 1981a. Comparative analysis of electrophoretic spectra of proteins in whales of Antarctica. 1. Hemoglobins and myoglobins of three species of baleen whales and sperm whales. Zool. Zh. 60: 438-442. (In Russian)

BORISOV, V.I. 1981b. Comparative analysis of the electrophoretic spectra of proteins in Antarctic whales. 2. Lactate dehydrogenase of three species of baleen whales and sperm whales. Zool. Zh. 60: 595-600. (In Russian)

BORISOV, V.I. 1981c. Comparative analysis of electrophoretic spectra of proteins on Antarctic whales. 3. Haptoglobins of lesser rorqual and sei whales. Zool. Zh. 60: 1406-1410. (In Russian)

BORN, E.W. 1982. Reproduction in the female hooded seal, Cystophora cristata Erxleben, at southern Greenland. J. Northwest Alt. Fish. Sci. 3: 57-62.

BORN, E.W., I. KRAUL, and T. KRISTENSEN. 1981. Mercury, DDT and PCB in the Atlantic walrus (Odobenus rosmarus rosmarus) from the Thule District, north Greenland. Arctic 34: 255-260.

BORN, E.W., and T. KRISTENSEN. In Press. Biology and exploitation of the Atlantic walrus, Odobenus rosmarus (L.), in the Thule district, north Greenland. Medd. Gronland Bioscience.

BORRUEL, M., P. BORRUEL, M.C. DAMASCO, and C.P. LANTOS. 1973. Biosynthesis of esteroids by suprarenal gland of the Weddell seal: an example of evolutionary and ecological adaptation. Contrib. Inst. Antarct. Argent. 157.

BORRUEL, M., P. BORRUEL, M.C. DAMASCO, and C.P. LANTOS. 1974. The in vitro investigation of four radioactive corticosteroids in the Antarctic seal (Leptonychotes weddelli). Gen. Comp. Endocrinol. 22: 1-12.

BOSHIER, D.P. 1977. Observations on the corpus luteum of the grey seal (Halichoerus grypus, Nilsson, 1820) at the time of ova-implantation, p. 333-359. In R.J. Harrison (ed.) Functional anatomy of marine mammals. Vol. 3. Academic Press, New York.

BOSSANYI, J. 1947. Notes on the keeping of a baby common seal (Phoca vitulina). Proc. Zool. Soc. Lond. 117: 791-792.

BOTELHO, L.H., S.H. FRIEND, J.B. MATTHEW, L.D. LEHMAN, G.I.H. HANANIA, and F.R.N. GURD. 1978. Proton magnetic resonance study of histidine ionizations in myoglobins of various species. Comparison of observed and computed pK values. Biochemistry 17: 5197-5207.

BOTELHO, L.H., and F.R.N. GURD. 1978. Proton nuclear magnetic resonance study of histidine ionizations of myoglobin of various species. Specific assignment of individual resonances. Biochemistry 17: 5188-5196.

BOTTA, J.R., E. ARSENAULT, and H.A. RYAN. 1982. Effect of sex, age and carcass cut in composition of harp seal (Phoca groenlandicus) meat. Can. Inst. Food Sci. Technol. J. 15: 229-232.

BOTTA, J.R., E. ARSENAULT, and H.A. RYAN. 1983. Total mercury content of meat and liver from inshore Newfoundland-caught harp seal (Phoca groenlandicus). Bull. Environ. Contam. Toxicol. 30: 28-32.

BOTTA, J.R., E. ARSENAULT, H.A. RYAN, and N. SHOUSE. 1982a. Chemical composition of meat and sensory quality of canned meat and frozen meat from harp seal (Phoca groenlandica) in molting and premolting conditions. Can. Tech. Rep. Fish. Aquat. Sci. 1053: iv + 18 p.

BOTTA, J.R., A.P. DOWNEY, J.T. LAUDER, and P.B. NOONAN. 1980. Utilization of inshore Newfoundland-caught harp seal (Pagophilus groenlandicus): sensory quality of frozen stored, salted and smoked seal meat. Can. Fish. Mar. Serv. Tech. Rep. 916: 24 p.

BOTTINO, N.R. 1971. Composition of marine-oil triglycerides as determined by silver ion thin-layer chromatography. J. Lipid Res. 12: 24-30.

BOTTINO, N.R. 1978. Lipids of the Antarctic sei whale, Balaenoptera borealis. Lipids 13: 18-23.

BOULVA, J. 1973. The harbour seal in Eastern Canada. Ph.D. Thesis, Dalhousie University, Halifax, NS. 152 p.

BOULVA, J., and I.A. McLAREN. 1979. Biology of the harbour seal, Phoca vitulina, in eastern Canada. Bull. Fish. Res. Board Can. 200: viii + 24 p.

BOWEN, W.D. 1982. Age structure of northwest Atlantic harp seal catches, 1952-1980. NAFO Sci. Counc. Stud. 3: 53-65.

BOWEN, W.D., C.K. CAPSTICK, and D.E. SERGEANT. 1981. Temporal changes in the reproductive potential of female harp seals (Pagophilus groenlandicus). Can. J. Fish. Aquat. Sci. 38: 495-503.

BOWEN, W.D., and D.E. SERGEANT. 1983. Mark-recapture estimates of harp seal (Phoca groenlandica) population in the northwest Atlantic. Can. J. Fish. Aquat. Sci. 40: 728-742.

BOWEN, W.D., D. SERGEANT, and T. ORITSLAND. 1983. Validation of all estimation in the harp seal, Phoca groenlandica, using dentinal annuli. Can. J. Fish. Aquat. Sci. 40: 1430-1431.

BOWES, G.W., and C.J. JONKEL. 1975. Presence and distribution of polychlorinated biphenyls in Arctic and subarctic marine food chains. J. Fish. Res. Board Can. 32: 2111-2123.

BOWES, G.W., and J.A. LEWIS. 1974. Extraction of polychlorinated biphenyls. Evaluation of column technique applied to polar bear and seal tissue. J. Assoc. Off. Anal. Chem. 57: 138-144.

BOWES, G.W., B.R. SIMONEIT, A.L. BURLINGAME, B.W. DE LAPPE, and R.W. RISEBROUGH. 1973. Search for chlorinated dibenzofurans and chlorinated dibenzodioxins in wildlife populations showing elevated levels of embryonic death. Environ. Health Perspect. 5: 191-198.

BOYD, I.L. 1983. Luteal regression follicle growth and the concentration of some plasma steroids during lactation in gray seals, Halichoerus grypus. J. Reprod. Fertil. 69: 157-164.

BRACHI, R.M. 1953. Examination of some components of cephalopod and sperm whale liver oil by the chromatographic method. Biochem. J. 54: 459-465.

BRADLEY, S.E., and R.J. BING. 1942. Renal function in the harbour seal (Phoca vitulina L.) during asphyxial ischemia and pyrogenic hyperemia. J. Cell. Comp. Physiol. 19: 229-237.

BRADLEY, S.E., G.H. MUDGE, and W.D. BLAKE. 1950. Water and electrolyte excretion by the harbour seal (Phoca vitulina). Fed. Proc. 9: 16-17.

BRADLEY, S.E., G.H. MUDGE, and W.D. BLAKE. 1954. The renal excretion of sodium, potassium and water by the harbour seal (Phoca vitulina L.): effect of apnea, sodium, potassium and water loading;

pitressin and mercurial diuresis. J. Cell. Comp. Physiol. 43: 1-22.

BRADSHAW, R.A., W.H. GARNER, and F.R.N. GURD. 1969a. Comparison of myoglobins from harbour seal, porpoise and sperm whale. 3. Isolation and characterization of the tryptic peptides of harbour seal myoglobin. J. Biol. Chem. 244: 2149-2158.

BRADSHAW, R.A., and F.R.N. GURD. 1969. Comparison of myoglobins from habour seal, porpoise and sperm whale. 5. The complete amino acid sequences of harbour seal and porpoise myoglobins. J. Biol. Chem. 244: 2167-2181.

BRADSHAW, R.A., R.H. KRETSINGER, and F.R.N. GURD. 1969b. Comparison of myoglobins from harbour seal, porpoise and sperm whale. 4. Isolation and characterization of the tryptic peptides of porpoise myoglobin. J. Biol. Chem. 244: 2159-2166.

BRAEKKAN, O.R. 1948. Vitamins in whale liver. Hvalradets Skr. 32: 1-25.

BRAEKKAN, O.R. 1949. Determination of vitamin A in whale-liver oils - activated glycerol dichlorohydrin. Anal. Chem. 21: 1530-1531.

BRAHAM, H.W. 1973. Lead in the California sea lion (Zalophus californianus). Environ. Pollut. 5: 253-258.

BRAHAM, H.W. 1974. The California sea lion on islands off the coast of San Luis Obispo County, California. Calif. Fish Game 60: 79-83.

BRAHAM, H.W. 1983. Northern records of Rissos dolphin, Grampus griseus, in the northeast Pacific. Can. Field-Nat. 97: 89-90.

BRAHAM, H.W., and B.D. KROGMAN. 1977. Population biology of the bowhead (Balaena mysticetus) and beluga (Delphinapterus leucas) whale in the Bering, Chukchi and Beaufort Seas. Processed Report, U.S. Department of Commerce, National Oceanic and Atmosphic Administration, National Marine Fisheries Service, Northwest Alaska Fisheries Center, National Marine Mammal Laboratory, Seattle, WA. 29 p.

BRAHAM, H., B. KROGMAN, and C. FISCUS. 1977. Bowhead (Balaena mysticetus) and beluga (Delphinapterus leucas) whales of Bering, Chukchi and Beaufort Seas. Environmental Assessment of the Alaskan Continental Shelf, Vol. 1: 134-160. N.O.A.A., U.S. Department of Commerce, Boulder, CO.

BRAIN, J.D., and D.E. LEITH. 1968a. Measurement of surfactant in pinnipeds, p. 144-145. In R.V. Alpha Helix Bering Sea Expedition. Project reports of the R.V. Alpha Helix Bering Sea Expedition, February to October, 1968. Phase B. National Science Foundation, National Institutes of Health, Washington, DC.

BRAIN, J.D., and D.E. LEITH. 1968b. Alveolar macrophages in pinniped lungs, p. 143. In R.V. Alpha Helix Bering Sea Expedition, Project Reports of the R.V. Alpha Helix Bering Sea Expedition, February to October, 1968. Phase B. National Science Foundation, National Institutes of Health, Washington, DC.

BRANDT, K. 1940. Whale Oil. An economic analysis. Stanford University Food Research Institute, Fats and Oils Study 7: 264 p.

BRANKLEY, C.A., and C.E. CORNELIUS (ed.). 1974. Advances in veterinary science and comparative medicine. Vol. 18. Academic Press, New York.

BREEN, P.A., T.A. CARSON, J.B. FOSTER, and E.A. STEWART. 1982. Changes in subtidal community structure associated with British Columbia sea otter, Enhydra lutris, transplants. Mar. Ecol. Prog. Ser. 7: 13-20.

BRESLOW, E., and N.M. RUMEN. 1967. Reactivity of seal myoglobin toward hydrogen ions. Arch. Biochem. Biophys. 121: 50-54.

BRESTKIN, A.P., E.V. ROZENGART, and L.M. EPSHTEIN. 1971. Properties of cholinesterase from the caudate nucleus of the brain of the seal, Phoca hispida lagodensis. Zh. Evol. Biokkim. Fiziol. 7: 474-477. (J. Evol. Biochem. Physiol. 7: 403-405)

BREWERTON, H.V. 1969. DDT in fats of Antarctic animals. N. Z. J. Sci. 12: 194-199.

BRICTEUX-GREGOIRE, S., R. SOHYNS, and M. FLORKIN. 1974. N-terminal amino acid sequence of trypsinogen from the elephant seal, Mirounga leonina (Carnivora). Biochim. Biophys. Acta 351: 87-91.

BRICTEUX-GREGOIRE, S., R. SOHYNS, M. FLORKIN, M. EMMENS, G.W. WELLING, and J.J. BEINTEMA. 1975. N-terminal amino acid sequence of trypsinogen from the lesser rorqual, Balaenoptera acutorostrata (Cetacea). Simultaneous isolation of trypsinogen, chymotrypsinogen and ribonuclease from pancreas. Biochim. Biophys. Acta 386: 244-255.

BRIEREM, K. 1949. Norwegian experiments regarding effects of the feed on the composition of milk and milk products. Proceedings of the 12th International Dairy Congress (Stockholm) 1: 28-60.

BRIGGS, G.D., R.V. HENRICKSON, and B.J. LE BOEUF. 1975. Ketamine immobilization of northern elephant seals. J. Am. Vet. Med. Assoc. 167: 546-548.

BRIGGS, K.T., and C.W. DAVIS. 1972. A study of predation by sea lions on salmon in Monterey Bay. Calif. Fish Game 58: 37-43.

BRINCK, P. 1947. Valrossen i zoologiens historia. Zool. Bidr. Upps. 25: 118-133.

BROCKERHOFF, H. 1966. Fatty acid distribution of animal depot fats. Comp. Biochem. Physiol. 19: 1-12.

BROCKERHOFF, H., and R.G. ACKMAN. 1967. Positional distribution of isomers of monoenoic fatty acids on animal glycerolipids. J. Lipid Res. 8: 661666.

BROCKERHOFF, H., and R.J. HOYLE. 1963. Structure of the depot fats of marine fish and mammals. Arch. Biochem. Biophys. 102: 452-455.

BROCKERHOFF, H., R.J. HOYLE, and P.C. HUANG. 1966a. Positional distribution of fatty acids in the fats of a polar bear and a seal. Can. J. Biochem. 44: 1519-1525.

BROCKERHOFF, H., R.J. HOYLE, P.C. HUANG, and C. LITCHFIELD. 1968. Positional distribution of fatty acids in depot triglycerides of aquatic animals. Lipids 3: 24-29.

BROCKERHOFF, H., R.J. HOYLE, and N. WOLMARK. 1966b. Positional distribution of fatty acids in triglycerides of animal depot fats. Biochim. Biophys. Acta 116: 67-72.

BROCKLESBY, H.N. 1941. The chemistry and technology of marine animal oils with particular reference to those of Canada. Bull. Fish. Res. Board Can. 59: 442 p.

BROCKLESBY, H.N., and O.F. DENSTEDT. 1933. The industrial chemistry of fish oils with particular reference to those of British Columbia. Bull. Biol. Board Can. 37: 150 p.

BROCKOVA, F.I. 1971. Seasonal variations in vitamin "A" content in the liver of certain mammals of the far north. Ekologiia (2): 77-81. (Sov. J. Ecol. 2: 148-152)

BRODIE, P.F. 1969. Mandibular layering in Delphinapterus leucas and age determination. Nature (Lond.) 221: 956-958.

BRODIE, P.F. 1971. A reconsideration of aspects of growth, reproduction and behavior on the white whale (Delphinapterus leucas) with reference to the Cumberland Sound, Baffin Island, population. J. Fish. Res. Board Can. 28: 1309-1318.

BRODIE, P.F. 1975. Cetacean energetics, an overview of intraspecific size variation. Ecology 56: 152-161.

BRODIE, P.F. 1979. Density dependent changes in feeding behavior and energetics of grey seals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. May 1979.

BRODIE, P.F. 1981. Energetic and behavioral considerations with respect to marine mammals and disturbance from underwater noise, p. 287-290. In N.M. Peterson (ed.) Symposium: the question of sound from icebreaker operations. Proceedings of the Workshop, 23-24 Feb., 1981, Toronto, Ont. Petro-Canada Arctic Pilot Project, Calgary, Alberta.

BRODIE, P.F., D.D. SAMEOTO, and R.W. SHELDON. 1978. Population densities of euphausiids off Nova Scotia as indicated by net samples, whale stomach contents and sonar. Limnol. Oceanogr. 23: 1264-1267.

BROOKES, L.G., and I.S. FOREST. 1971. In vitro metabolism of 3H-chlorpromazine in various mammals: a preliminary report on thirteen species. Exp. Med. Surg. 29: 61-71.

BROOKES, L.G., and I.S. FORREST. 1973. Intraspecies variation in chlorpromazine metabolism. Chem. Pathol. Pharmacol. Res. Commun. 5: 741-758.

BROOKES, L.G., I.S. FOREST, and R.C. HUBBARD. 1969. Inter-species differences on eleven mammals of in vitro chlorpromazine metabolism using hepatic microsomes, p. 5-12. In Symposium: biological sonar and diving mammals. Proceedings of the 6th annual conference on biological sonar and diving mammals, October 16-17, 1969, Stanford Research Institute, Biological Sonar Laboratory, Menlo Park, CA.

BROOKS, J.W. 1953. The Pacific walrus and its importance to the Eskimo economy. Trans. N. Am. Wildl. Conf. 18: 503-511.

BROOKS, J.W. 1954a. Beluga investigations. 1954 Annu. Rep. Alaska Dep. Fish. 6: 51-57.

BROOKS, J.W. 1954b. Preliminary report on beluga investigations in Bristol Bay. Alaska Department of Fisheries, Juneau (unpublished).

BROOKS, J.W. 1955. Beluga investigations. 1955 Annu. Rep. Alaska Dep. Fish. 7: 98-106.

BROOKS, J.W. 1956. Beluga investigations. 1956 Annu. Rep. Alaska Dep. Fish. 8: 52-58.

BROOKS, J.W. 1957. Beluga investigations. 1957 Annu. Rep. Alaska Dep. Fish Game 9: 57-58.

BROWN, A.S., T.W. CORNELIUS, J.E. VOLANAKIS, and J.C. BENNETT. 1983. A comparison of fluorescamine and o-phthaldialdehyde as effective blocking reagents in protein sequence analyses by the Beckman sequencer. Anal. Biochem. 131: 337-340.

BROWN, D.H. 1962. The health problems of walrus calves, and remarks on their general progress in captivity. Int. Zoo Yearb. 4: 13-22.

BROWN, D.H., R.W. McINTYRE, C.A. DELLI QUARDRI, and H. SCHROEDER. 1960. Health problems of captive dolphins and seals. J. Am. Vet. Med. Assoc. 137: 534-538.

BROWN, D.H., and K.S NORRIS. 1956. Observations of captive and wild cetaceans. J. Mammal. 37: 311-326.

BROWN, E.M., and F.E. SOUTH. 1978. History of the California sea lion skin, Zalophus californianus. Abstract. Anat. Rec. 190: 349.

BROWN, G.W., Jr, and W.S.T. MAYHALL. 1977. On urea formation in marine mammals. Experientia 33: 591-592.

BROWN, J.B., and A.L. RAWLINS. 1926. Effect of feeding whale oil on depot fat of the white rat. Proc. Soc. Exp. Biol. Med. 26: 704-705.

BROWN, J.R. 1976. Evolution of serum albumin. Fed. Proc. 35: 1335.

BROWN, R. 1868. Notes on the history and geographical relations of the Cetacea frequenting Davis Strait and Baffin's Bay. Proc. Zool. Soc. Lond. 533-556.

BROWN, R.E., and B.R. MATE. 1983. Abundance movements and feeding habits of harbour seals, Phoca vitulina, at Netarts Bay and Tillamook Bay, Oregon, U.S.A. U.S. Natl Mar. Fish. Serv. Fish. Bull. 81: 291-302.

BROWN, R.J., A.W. SMITH, and M.C. KEYES. 1975. Renal fibrosarcoma in the northern fur seal. J. Wildl. Dis. 11: 23-25.

BROWN, R.J., A.W. SMITH, G.V. MOREJOHN, and R.L. DE LONG. 1980. Metastatic adenocarcinoma in two California sea lions, Zalophus c. californianus. J. Wildl. Dis. 16: 261-266.

BROWN, S. 1975. Environmental impacts of arctic oil and gas development. University of Western Ontario, University of Waterloo, Inuit Tapirisat of Canada, Renewable Resources Project, Vol. 6.

BROWN, W.E. III, J.W. SUTCLIFFE, and P.D. PULSINELLI. 1983a. Multiple internal reflectance IR spectra of variably hydrated hemoglobin and myoglobin films effects of globin hydration on ligand conformer dynamics and reactivity at the heme. Biochemistry 22: 2914-2923.

BROWN, W.R., J.R. GERACI, B.D. HICKS, D.J. ST. AUBIN, and D.J. SCHROEDER. 1983b. Epidermal cell proliferation in the bottlenose dolphin (Tursiops truncatus). Can. J. Zool. 61: 1587-1590.

BROWNELL, R.L., and B.J. LE BOEUF. 1971. California sea lion mortality natural or artifact? p. 287-306. In D. Straughan (ed.) Biological and oceanographical survey of the Santa Barbara Channel oil spill, 1969-70. Vol. 1. University of Southern California, Allen Hancock Foundation, Los Angeles, CA.

BRUEGGEMAN, J.J. 1982. Early spring distribution of bowhead whales, Balaena mysticetus, in the Bering Sea. J. Wildl. Manage. 46: 1036-1044.

BRYANT, P.J., G. NICHOLS, T.B. BRYANT, and K. MILLER. 1981. Krill availability and the distribution of humpback whales, Megaptera novaeangliae, in southeastern Alaska, U.S.A. J. Mammal. 62: 427-430.

BRYDEN, M.M. 1964. Insulating capacity of the subcutaceus fat of the southern elephant seal. Nature (Lond.) 203: 1299-1300.

BRYDEN, M.M. 1967. Study of the biology of the southern elephant seal, Mirounga leonina (Linn.). Development and growth. Ph.D. Thesis, University of Sydney, Sydney, Australia.

BRYDEN, M.M. 1968a. Development and growth of southern elephant seal, (Mirounga leonina (Linn.).) Pap. Proc. R. Soc. Tasmania 102: 25-30.

BRYDEN, M.M. 1968b. Lactation and suckling in relation to early growth of the southern elephant seal, Mirounga leonina (L.). Aust. J. Zool. 16: 739-748.

BRYDEN, M.M. 1968c. Growth and function of the subcutaneous fat of the elephant seal. Nature (Lond.) 220: 597-599.

BRYDEN, M.M. 1969a. Regulation of relative growth by functional demand: its importance in animal production. Growth 33: 143-156.

BRYDEN, M.M. 1969b. Relative growth of major body components of the southern elephant seal, Mirounga leonina (L.). Aust. J. Zool. 17: 153-177.

BRYDEN, M.M. 1969c. Growth of the southern elephant seal, Mirounga leonina (Linn.). Growth 33: 69-82.

BRYDEN, M.M. 1970. Utilization of the meat of elephant seals. Proc. Aust. Soc. Anim. Prod. 8: 106-108.

BRYDEN, M.M. 1971. Size and growth of viscera in the southern elephant seal, Mirounga leonina (L.). Aust. J. Zool. 19: 103-120.

BRYDEN, M.M. 1972. Body size and composition of elephant seals, Mirounga leonina, absolute measurements and estimate from bone dimensions. J. Zool. (Lond.) 167: 265-276.

BRYDEN, M.M. 1972a. Growth and development of marine mammals, p. 2-79. In R.J. Harrison (ed.) Functional anatomy of marine mammals. Vol. 1. Academic Press, London.

BRYDEN, M.M., and A.W. ERICKSON. 1976. Body size and composition of crabeater seals (Lobodon carcinophagus), with observations on tissue and organ size in Ross seals (Ommatophoca rossi). J. Zool. (Lond.) 179: 235-247.

BRYDEN, M.M., and G.M.K. LIM. 1969. Blood parameters of the southern elephant seal (Mirounga leonina Linn.) in relation to diving. Comp. Biochem. Physiol. 28: 139-148.

BRYDEN, M.M., and G.B. STOKES. 1969. Metabolism of fatty acids in the southern elephant seal, Mirounga leonina. Can. J. Biochem. 47: 757-760.

BUCKLEY, J.L. 1958. The Pacific walrus: a review of current knowledge and suggested management needs. U.S. Fish Wildl. Serv. Spec. Sci. Rep. Wildl. 41: 29 p.

BUCKLEY, J.R., T. GAMMELSROD, J.A. JOHANNESSEN, O.M. JOHANNESSEN, and L.P. ROED. 1979. Upwelling: oceanic structure at the edge of the Arctic ice pack in winter. Science (Wash. DC) 203: 165-167.

BUDANTSEVA, S.I. 1973. Histomorphological evaluation of the effect of benzohexonium and the preparation sperm oil (whale oil) on the regeneration of chronic gastric ulcers in rats. Farmakol. Toksikol. 36: 715-718. (In Russian)

BUDANTSEVA, S.I. 1980. Effect of spermaceti oil, corn oil, and cod liver oil on variations, the activity of alanine aminotransferase, alkaline phosphatase and bilirubin content. Farmakol. Toksikol. 43: 425-431. (In Russian)

BUHLER, D.R. (ed.) 1973. Symposium: mercury in the western environment. Proceedings of a workshop, Portland, Oregon, 1971. Oregon State University Press, Corvallis, OR.

BUHLER, D.R., R.R. CLAEYS, and B.R. MATE. 1975. Heavy metals and chlorinated hydrocarbon residues in California sea lions (Zalophus californianus). J. Fish. Res. Board Can. 32: 2391-2397.

BUHLER, D.R., and B.R. MATE. 1975. The fate of carbon-14 methyl mercury-203 mercuric chloride in the California sea lion (Abstract). Toxicol. Appl. Pharmacol. 33: 189.

BUKIN, V.N. AND E.P. SKOROBOGATOVA. 1951. Liver of whales as raw material for production of vitamin A. Akad. Nauk SSSR, Inst. Biokhim. im. A.N. Bakha, Vitaminnye Resursy i Ispol'zovanie Sbornik 1: 207-215. (In Russian)

BULATOV, A.A., V.Ya. IGNATOV, Yu.A. BABICHEV, and Yu.A. PANKOV. 1983. Neurotropic effect of pituitary somatropin and its fragments. Probl. Endokrinol. 29: 50-54. (In Russian)

BULATOV, A.A., T.A. OSIPOVA, and Yu.A. PANKOV. 1980. Hydrophobic peptide with growth activity from the trypsin hydrolysate of sperm whale somatotropin. Probl. Endokrinol. 26: 54-57. (In Russian)

BULATOV, A.A., and N.V. SADOVNIKOVA. 1981. Study of the effect of whale somatotropin and its biologically active fragment on several parameters of carbohydrate metabolism in rat diaphragmic muscle in vivo. Probl. Endokrinol. 27: 63-65. (In Russian)

BULLIER, P. 1935. Un cas d'intoxication chez des phoques (Phoca vitulina L.) par le chlorure de sodium. Bull. Acad. Vet. Fr. N.S. 8: 293-296.

BULLIER, P. 1954. Alimentation et acclimatement d'éléphants de mer (Mirounga leonina L.) en captivité, au parc zoologique du bois de Vincennes. Mammalia 18: 272-276.

BULLOCK, T.H., A.D. GRINNELL, E. IKEZONO, K. KAMEDA, Y. KATSUKI, M. NOMOTO, O. SATO, N. SUGA, and K. YANAGISAWA. 1968. Electrophysiological studies of central auditory mechanisms in cetaceans. Z. Vergl. Physiol. 59: 117-156.

BULLOCK, T.H., and S.H. RIDGWAY. 1972. Neurophysiological findings relevant to echolocation in marine animals. U.S. Natl Aeronaut. Space Admin. Spec. Publ. 262: 373-395.

BULLOUGH, W.S. 1951. Vertebrate sexual cycle. Methuen, London. 177 p.

BUNN, H.F., U.S. SEAL, and A.F. SCOTT. 1974. The role of 2,3-dipnosphoglycerate in mediating hemoglobin function of mammalian red cells. Ann. N.Y. Acad. Sci. 241: 498-512.

BURKE, F., and H. JASPERSON. 1944. The component acids of seal oil. J. Soc. Chem. Ind. Lond. 63: 245-247.

BURKHARDT, G.N., I.M. HEILBRON, H. JACKSON, and E.G. PARRY. 1934. Pigmented marine animal acids. I. Pigments from angler fish (Lophius piscatorius), the prawn (Nephrops norvegicus) and the whale. Biochem. J. 28: 1698-1701.

BURNE, R.H. 1909. Notes on the viscera of a walrus (Odobaenus rosmarus). Proc. Zool. Soc. Lond. 1909: 732-738.

BURNS, J.J. 1965. The walrus in Alaska, its ecology and management. Alaska Dep. Fish Game, Fed. Aid Wildl. Restor. Annu. Proj. Segm. Rep. 5. Proj. W-6-R-5.

BURNS, J.J. 1967. The Pacific bearded seal. Alaska Dep. Fish Game, Fed. Aid Wildl. Restor. Projects W-6-R and W-14-R. 3: 66 p.

BURNS, J.J. 1981. Ribbon seal - Phoca fasciata Zimmermann, 1783, p. 89-109. In S.H. Ridgway and R.J. Harrison (ed.) Handbook of marine mammals. Vol. 2. Seals. Academic Press, New York, NY.

BURNS, J.J. 1981a. Bearded seal - Erignathus barbatus Erxleben, 1777, p. 145-170. In S.H. Ridgway and R.J. Harrison (ed.) Handbook of marine mammals. Vol. 2. Seals. Academic Press, New York, NY.

BURNS, J.J., and K.J. FROST. 1979. The natural history and ecology of the bearded seal, Erignathus barbatus. Final Report RU 230. Outer Continental Shelf Assessment Program, Boulder, CO. 77 p.

BURNS, J.J., and A. GAVIN. 1980. Recent records of hooded seals (Cystophora cristata Erxleben) from the western Beaufort Sea. Arctic 33: 326-29.

BURNS, J.J., L.A. SHAPIRO, and F.H. FAY. 1980. The relationship of marine mammal distributions, densities and activities to sea ice conditions. Final report to BLM/NOAA Outer Continental Shelf environmental assessment program. Alaska Department of Fish and Game, and Institute of Marine Science, Fairbanks, AK.

BURRELL, D.C. 1979. Heavy metal contents of Bering Sea seals, p. 617. In B.R. Maltoff (ed.) Alaska fisheries: 200 years and 200 miles of change. Proc. Alaska Sci. Conf. 29, 1978.

BURTON, R.W., S.S. ANDERSON, and C.F. SUMMERS. 1975. Perinatal activities in the grey seal (Halichoerus grypus). J. Zool. (Lond.) 177: 197-201.

BUSNEL, R.-G., and A. DZIEDZIC. 1966. Resultats métrologiques expérimentaux de l'écholocation chez le Phocoena phocoena et leur comparaison avec ceux de certaines chauvessouris, p. 307-335. In R.-G. Busnel (ed.) Animal sonar systems, biology and bionics. Laboratoire de Physiologie Acoustique, Jouy-en-Josas, France.

BUTT, J.A. 1977. Food of the fresh water dolphin, Platanista minor Owen, from the River Indus Dera Ismail Khan, Pakistan. Biologia (Lahore) 23: 91-94.

BYCHKOV, V.A. 1971-1972. Age variation of body length and weight of fur seals of Tyuleny Island. Ekologiya 2(1): 102-105. (Sov. J. Ecol. 2: 81-83)

CAHALANE, V.H. 1947. Mammals of North America. Macmillan Company, New York. 628 p.

CAINES, L.A. 1978. Heavy metal residues in grey seals (Halichoerus grypus) from the Farne Islands. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. Mar. Environ. Qual. Comm. 1978/E:40.

CALAMBOKIDIS, J., S. CARTER, and J. CUBBAGE. 1979. The concentrations and dynamics of chlorinated hydrocarbon contaminants in harbor seals and their use in gaining biological information, p. 6. In Symposium: biology of marine mammals, Abstracts of presentations at 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

CALDWELL, D.K. and M.C. CALDWELL. 1971. Sounds produced by two rare cetaceans stranded in Florida. Cetology 4: 1-6.

CALDWELL, D.K., and M.C. CALDWELL. 1974. The need for studies of marine mammals in the eastern Gulf of Mexico, p. 339-343. In R.E. Smith (ed.) Symposium: marine environmental implications of offshore drilling in the eastern Gulf of Mexico. Proceedings. Florida State University, Institute of Oceanography, St. Petersburg, FL.

CALHAEM, I., and D.A. CHRISTOFFEL. 1969. Some observations on the feeding habits of Weddell seal, and measurements of its prey, Dissostichus mawsoni, at McMurdo Sound, Antarctica. N. Z. J. Mar. Freshwater Res. 3: 181-190.

CALKINS, D.G. 1978. Feeding behavior and major prey species of the sea otter, Enhydra lutris, in Montague Strait, Prince William Sound, Alaska. U.S. Natl Mar. Fish. Serv. Fish. Bull. 76: 125-132.

CAMA, J.S., and J.L. MEARA. 1953. Component acids of milk fats of Balaenoptera physalus (finner whale). Biochem. J. 55: 365-368.

CANADIAN ARCTIC RESOURCES COMMITTEE (CARC). 1980. Marine traffic forecast, Northwest passage. Appendix to CARC submission to EARP review of the Arctic Pilot Project. April 1980. Ottawa. 71 p.

CANIVENC, R. 1960. L'ovo-implantation differée des animaux sauvages, p. 33-86. In Colloque sur les fonctions de nidation uterine et leurs trouble. Masson et Cie, Paris.

CANIVENC, R., and M. BONNIN-LAFFARGUE. 1973. Biologie luteale dans les espèces à nidation différée, p. 133-173. In R. Denamur and A. Netter (ed.) Le corps jaune. Masson et Cie, Paris.

CANNATA, M.A., and J.H. TRAMEZZANI. 1971. Neurophypophysis of the Weddell seal: an electron microscope study. J. Anat. 108: 185-195.

CANSDALE, G. 1970. Hand-rearing common seals, Phoca vitulina, at Skegness Natureland. Int. Zoo Yearb. 10: 146-147.

CAPPON, C.J., and J.C. SMITH. 1981. Mercury and selenium content and chemical form in human and animal tissues. J. Anal. Toxicol. 5: 90-98.

CARDIN, A., and M.L. MEARA. 1953. The lipids of the grey (Atlantic) seal, p. 49-58. In Internationaal Colloquium over biochemische Problemen der Lipiden. Bruxelles, 11-13 Juni, 1953. K. Vlaam. Acad. Wet. Lett. Schone Kunsten Belgie, Bruxelles, Paleis Acad.

CARGILL, C.F., D.J. NEEDHAM, and G.J. JUDSON. 1979. Plasma biochemical values of clinically-normal Australian sea lions (Neophoca cinerea). J. Wildl. Dis. 15: 105-110.

CARLTON, R.G., and W.E. SCHEVIL. 1974. Feeding of a captive gray whale, Eschrichtius robustus. Mar. Fish. Rev. 36(4): 31-38.

CARNIO, J., B. CHUPA, and J. STONER. 1982. Management and breeding of the South African fur seal, Arctocephalus pusillus, at Metro Toronto Zoo, Canada. Int. Zoo Yearb. 22: 207-215.

CAROLA, C. 1957. Characters of some oils and fats of animal origin. II. Oils and fats of marine animals. Olii minerali, grassi e saponi, colori e vernici 34: 382-390.

CARRICK, R., S.E. CSORDAS, S.E. INGHAM, and K. KEITH. 1962. Studies on the southern elephant seal, Mirounga leonina (L.). III. The annual cycle in relation to age and sex. CSIRO Wildl. Res. 7: 119-160.

CARPENTER, K.J., G.M. ELLINGER, and D.H. SHRIMPTON. 1955. Evaluation of whaling by-products as feeding stuffs. J. Sci. Food Agric. 6: 296-304.

CARPENTER, S.M. 1977. Further studies of plankton ecosystems in the eastern Indian Ocean: IV. Numerical treatment of site-species data. Aust. J. Mar. Freshwater Res. 28: 585-592.

CARTER, N.M. 1968. Index and list of titles, Fisheries Research of Canada and associated publications, 1900-1964. Fish. Res. Board Can. Bull. 164: 649 p.

CARTER, N.M. 1973. Index and list of titles Fisheries Research Board of Canada and associated publications 1965-1972. Fish. Res. Board Can. Misc. Spec. Publ. 18: 588 p.

CASE, T.J. 1978. On the evolution and adaptive significance of post natal growth rates in the terrestrial vertebrates. Q. Rev. Biol. 53: 243-282.

CASTELLINI, M.A. 1979. An enzymatic profile of marine mammals, p. 8. In Symposium: biology of marine mammals, Abstracts. Presentations at the 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

CASTELLINI, M.A. 1981. Biochemical adaptations for diving in marine mammals. Ph.D. Thesis, University of California, San Diego, CA.

CASTELLINI, M.A., G.N. SOMERO, and G.L. KOOYMAN. 1981. Glycolytic enzyme activities in tissues of marine and terrestrial mammals. Physiol. Zool. 54: 242-252.

CASTELLO, H.P. 1977. Food of a killer whale: eagle sting ray, Myliobatis, found in the stomach of a stranded Orcinus orca. Sci. Rep. Whales Res. Inst. Tokyo 29: 107-112.

CASTILLO, O., H. LEHMANN, and L.T. JONES. 1977. The myoglobin of a killer whale (Orcinus orca). Biochim. Biophys. Acta 491: 23-28.

CAVAGNOLO, R.Z., and N.A. VEDROS. 1978. Identification and characterization of three immunoglobin classes in the northern fur seal, Callorhinus ursinus. Dev. Comp. Immunol. 2: 689-697.

CAVAGNOLO, R.Z. 1979. The immunology of marine mammals. Dev. Comp. Immunol. 3: 235-257.

CAVAGNOLO, R.Z., and N.A. VEDROS. 1978a. Significance of immunoglobulin levels in the northern fur seal, Callorhinus ursinus (Abstract). Fed. Proc. 37: 174.

CAVAGNOLO, N.Z., and N.A. VEDROS. 1979. Serum and colostrum immunoglobulin levels in the northern fur seal, Callorhinus ursinus. Dev. Comp. Immunol. 3: 139-146.

CELLIERS, P.G. 1961. Chemical composition of some South African marine products. S. Afr. J. Agric. Sci. 4: 317-330.

CHALLINOR, C.J., R.J. HAMILTON, and K. SIMPSON. 1969. Sperm whale head oil. I. The ester fraction. Chem. Phys. Lipids 3: 145-151.

CHALMERS, A.E.G., V.W. McGEER, and P.L. McGEER. 1970. Distribution of glutamic acid decarboxylase in the brains of various mammalian species. Comp. Gen. Pharmacol. 1: 385-390.

CHANG, F.-M., J.-Y. YU, and Y.-L. SUNG. 1972. Effect of whale gastrone preparation on the experimental peptic ulcers. J. Formosan Med. Assoc. 71: 160-169.

CHAPMAN, D.G. 1962. Problems in the analysis of tagging experiments with particular reference to fur seal experiments. Am. Zool. 2: 491.

CHAPSKII, K.K. 1938. The bearded seal (Erignathus barbatus Fabr.) of the Kara and Barents Seas, p. 7-79. In K.K. Chapskii and K.V. Kovalev (ed.) Promyslovye mlekopitaushchie Barentsova Mory i Karskogo morei [Game mammals of the Barents and Kara seas]. Tr. Leningrad Arkt. Nauchno. Issled Inst. 173: Trudy Arkticheskogo Instituta 173. (Can. Fish. Mar. Serv. Transl. Ser. 3162, 1974. 145 p.)

CHAPSKII, K.K. 1965a. The growth and onset of sexual maturity in female Caspian seals, p. 122-137. In E.N. Pevlovskii et al. (ed.) Morskie mlekopitayuschie (Marine mammals). Nauka, Moscow. (In Russian)

CHAPSKII, K.K. 1965b. Tests on examination and diagnosis of Phocidae subspecies. Tr. Zool. Inst. Akad. Nauk SSSR 27.

CHAPSKII, K.K. 1965c. The initial period of postnatal growth in the harp seal (Pagophoca groenlandica), p. 138-157. In E.N. Pevlovskii et al. (ed.) Marine mammals. Akademiya, Nauka, Moscow. (Fish. Res. Board Can. Transl. Ser. 1378, 1970. 42 p.)

CHARTERS, E.M. 1947. Bibliography on walrus. U.S. Fish. Wildl. Serv. Wildl. Leafl. 293: 14 p.

CHAUVET, J., M.T. CHAUVET, and R. ARCHER. 1963. The neurohypophyspeal hormones of mammals; isolation and characterization of the oxytocin and vasopressin of the whale, Balaenoptera physalus L. Bull. Soc. Chim. Biol. 45: 1369-1378.

CHAUVET, M.T., P. CODOGNO, J. CHAUVET, and R. ARCHER. 1978. Phylogeny of neurophysins. Complete amino acid sequence of whale (Balaenoptera physalus) MSEL-neurophysin. FEBS Lett. 88: 91-93.

CHEKUMOVA, V.S. 1963. Peculiarities of the histological structure of skin and its fat connective tissue of Greenland seal, p. 113-129. In A.S. Tsapko (ed.) Sbornik Nauchno-Issledovatelskikh Rabot 1962. Grenlandskii Tyulen Ikhoklach (A collection of scientific investigations. 1962. Greenland and hooded seals) Knizh, Arkhangelsk. (In Russian)

CHEN, R.F. 1967. Fluorescence of dansyl amino acids in organic solvents and protein solutions. Arch. Biochem. Biophys. 120: 609-620.

CHENG, Y.-C., and R.E. PARKS. 1972. The distribution of nucleoside diphosphokinase isozymes in animal tissues. Fed. Proc. 31: 847.

CHERNIKIN, E.M. 1978. Data on the ecology on the brown bear on the northeastern shores of Lake Baikal Russian-S.F.S.R., U.S.S.R. Byull. Mosk. Ova Ispyt. Prir. Otd. Biol. 83: 57-66. (In Russian)

CHERNOIVANOV, V.A., and L.V. BOGDANOV. 1979. Inherited polymorphism of the northern fur seal (Callorhinus) in relation to blood serum peroxidase, p. 129-133. In Biokhim. i Populyatsion Genet. Ryb. Leningrad. (In Russian)

CHIARELLI, A.B., and E. CAPANNA. (ed.) 1973. Cytotaxonomy and vertebrate evolution. Academic Press, New York, NY.

CHOON, O.C., and G.A. RODLEY. 1983. Spectral studies of magnesium porphyrin apomyoglobin and apohemoglobin complexes. J. Inorg. Biochem. 19: 189-202.

CHRISTIANSEN, B.O. 1981. A unique observation of a herd of polar bears, Ursus maritimus. Fauna (Oslo) 34: 129-130.

CHRISTIANSEN, E.N., J.I. PEDERSEN, and H.J. GRAV. 1969. Uncoupling and recoupling of oxidative phosphorylation in brown adipose tissue mitochondria. Nature (Lond.) 222: 857-860.

CHUBA, J.V., W.J. KUHNS, R.F. NIGRILLI, R.A. MORRIS, and V.E. FRIESE. 1970. B-like blood factor of fur seals and sea lions. Comparative study with D-galactose inhibition human group B-erythrocytes and B-active human, baboon and Rhesus monkey saliva. Haematologia 4: 85-96.

CHUGUNKOV, D.I. 1970. Loss of tags by fur seals tagged on Commander Islands. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 70: 245-249. (In Russian)

CHUZHAKINA, E.S., and V.M. GUDKOV. 1978. Feeding of the Caspian seal, Phoca caspica, in captivity. Zool. Zh. 57: 1417-1422. (Can. Transl. Fish. Aquat. Sci. 4514, 1979. 12 p.)

CLARKE, M.R. 1978a. Structure and proportions of the spermaceti organ in the sperm whale. J. Mar. Biol. Assoc. U.K. 58: 1-18.

CLARKE, M.R. 1978b. Physical properties of spermaceti oil on the sperm whale. J. Mar. Biol. Assoc. U.K. 58: 19-26.

CLARKE, M.R. 1978c. Buoyancy control as a function of the spermaceti organ in the sperm whale. J. Mar. Biol. Assoc. U.K. 58: 27-72.

CLARKE, M.R. 1980. Cephalopoda in the diet of sperm whales of the southern hemisphere and their bearing on sperm whale biology. Discovery Rep. 37: 1-324.

CLARKE, M.R., and T.K. KRISTENSEN. 1980. Cephalopod beaks from stomachs of two northern bottle-nosed whales (Hyperoodon ampullatus). J. Mar. Biol. Assoc. U.K. 60: 151-156.

CLARKE, M.R., and N. MacLEOD. 1974. Cephalopod remains from a sperm whale caught off Vigo, Spain. J. Mar. Biol. Assoc. U.K. 54: 959-968.

CLARKE, M.R., and N. MacLEOD. 1981. Cephalopod remains from the stomachs of sperm whales caught in the Tasman Sea. Mem. Natl Mus. Victoria 43: 25-42.

CLARKE, M.R., and N. MacLEOD. 1982. Cephalopod remains in the stomachs of 8 Weddell seals, Leptonychotes weddelli. Br. Antarct. Surv. Bull. 57: 33-40.

CLARKE, M.R., and F. TRILLMICH. 1980. Cephalopods in the diet of fur seals of the Galapagos Islands. J. Zool. (Lond.) 190: 211-215.

CLARKE, R., L.A. AGUAYO, and S.B. DEL CAMPO. 1978. Whale observations and whale marking off the coast of Chile in 1964. Sci. Rep. Whales Res. Inst. Tokyo 30: 117-178.

CLAUSEN, J., and O. BERG. 1975. The content of polychlorinated hydrocarbons in Arctic ecosystems. Pure Appl. Chem. 42: 223-232.

CLAUSEN, G., and A. ERSLAND. 1969. The respiratory properties of the blood of the bladdernose seal, Cystophora cristata. Human Resp. Physiol. 7: 1-6.

CLAUSEN, J., L. BRAESTRUP, and O. BERG. 1974. Content of polychlorinated hydrocarbons in arctic mammals. Bull. Environ. Contam. Toxicol. 12: 529-534.

CLEGG, W. 1951. Characteristics of oil from cold rendered fur seal blubber. Commer. Fish. Rev. 13(2): 30-31.

CLELAND, J.B., and R.V. SOUTHCOTT. 1969. Illness following the eating of seal liver in Australian waters. Med. J. Aust. 1: 760-763.

CLEMENS, W.A., J.L. HART, and G.W. WILBY. 1936. Analysis of stomach contents of fur seal taken off the west coast of Vancouver Island in April and May, 1935. Department of Fisheries, Ottawa. 20 p.

CLEMENS, W.A., and G.V. WILBY. 1933. Food of the fur seal off the coast of British Columbia. J. Mammal. 14: 43-46.

CLEMENTS, J.A. 1971. Comparative lipid chemistry of lungs. Arch. Intern. Med. 137: 387-389.

CLEMENTS, J.A., J. NELLENBOGEN, and H.J. TRAHAN. 1970. Pulmonary surfactant and evolution of lungs. Science (Wash. DC) 169: 603-604.

CLINE, D.R., D.B. SINIFF, and A.W. ERICKSON. 1969. Immobilizing and collecting blood from Antarctic seals. J. Wildl. Manage. 33: 138-144.

CLOUGH, F.B., H.M. KASCHER, C.D. ROBESON, and J.G. BAXTER. 1947. Crystalline kitol. Science (Wash. DC) 105: 436.

CMELIK, S. 1950. The oil of the dolphin's body. Glas. Khem. Drush. Beogr. 15: 173-182.

COCIVERA, M. 1971. Physiological characteristics of harp seals, a scientific mystery. Sci. Dimen. 3: 22-27.

COCKRILL, W.R. 1951. Antarctic pelagic whaling. Vet. Rec. 63: 111-125.

COCKRILL, W.R. 1960. Pathology of the Cetacea - A veterinary study on whales. Brit. Vet. J. 116: 1-28.

COHEN, E., G. CHAO, D. HOHN, C. GODSELL, and J.E. FITZPATRICK. 1983. Differential lymphocytotoxicity of Orcinus orca, killer whale, sera for human leukemic and normal lymphocytes (Abstract). Fed. Proc. 42: 4362A.

COLGROVE, G.S., T.R. SAWA, J.T. BROWN, P.F. McDOWELL, and P.E. NACHTIGALL. 1975. Necrotic stomatitis in a dolphin. J. Wildl. Dis. 11: 460-464.

COLONNA, G., G. IRACE, G. PARLATO, S.M. ALOJ, and C. BALESTRIERI. 1978. The effect of evolution on homologous proteins. A comparison between the chromophore microenvironments of Italian water buffalo (Bos bubalus L.) and sperm whale apomyoglobin. Biochim. Biophys. Acta 532: 354-367.

COMBS, G.F., G.H. ARSCOTT, and H.L. JONES. 1954. Unidentified growth factors required by chicks and poults. III. Chick studies involving practical type ratios. Poultry Sci. 33: 71-79.

COMEAU, N.A. 1923. The harp seal (Phoca groenlandica), p. 127-136. In N.A. Comeau (ed.) Life and sport on the north shore of the Lower St. Lawrence Gulf, Quebec. 2nd ed. Daily Telegraph Print House, Quebec.

CONACHER, H.B.S., B.D. PAGE, and R.K. CHADHA. 1972. Isomers of monoethylenic fatty acids in some partially hydrogenated marine oils. J. Am. Oil Chem. Soc. 49: 520-523.

CONDY, P.R. 1981a. Post natal development and growth on southern elephant seals, Mirounga leonina, at Marion Island, Antarctica. S. Afr. J. Wildl. Res. 10: 118-122.

CONDY, P.R. 1981b. Annual food consumption and seasonal fluctuations in biomass of seals at Marion Island, southern Pacific Ocean. Mammalia 45: 21-30.

COOK, H.W., and B.E. BAKER. 1969. Seal milk. I. Harp seal (Pagophilus groenlandicus) milk: composition and pesticide residue content. Can. J. Zool. 47: 1129-1132.

COOKE, N.E., and N.M. CARTER. 1947. Is our fish waste being exploited fully? Fish. Res. Board Can. Pac. Coast Stn Prog. Rep. 71: 5-11.

CORDES, D.O. 1982. The causes of whale strandings. N. Z. Vet. J. 30: 21-23.

CORNELL, L.H. 1975. Feeding new born Pinnipedia. Am. Assoc. Zoo Vet. Annu. Proc. 1975: 167-180.

CORNELL, L.H. 1978. Capture, transportation, restraint and marking, p. 573-580. In M.E. Fowler (ed.) Zoo and wild animal medicine. W.B. Saunders Co., Toronto.

CORNELL, L.H. 1983. Hematology and clinical chemistry values in the killer whale, Orcinus orca L. J. Wildl. Dis. 19: 259-264.

CORNELL, L.H., D.A. DUFFIELD, and J.E. ANTRIM. 1981. Clinical application of hematological values in captive cetaceans. Am. Assoc. Zoo Vet. Annu. Proc. 1981: 80-83.

CORNER, E.D.S. 1975. The fate of fossil fuel hydrocarbons in marine animals. Proc. R. Soc. Lond. Ser. B, Biol. Sci. 189: 391-413.

CORTES, V.D. 1952. Determination of nicotinic acid in animal tissues. An. Fac. Farm. Bioquim. Univ. Nac. Mayor San Marcos 3: 71-77.

COSTA, D.P. 1978. Ecological energetics, water and electrolyte balance of the California sea otter, Enhydra lutris. Ph.D. Thesis, University of California, Santa Cruz, CA.

COSTA, D.P. 1982. Energy, nitrogen and electrolyte flux and sea water drinking in the sea otter, Enhydra lutris. Physiol. Zool. 55: 35-44.

COSTA, D.P., and G.L. KOOYMAN. 1982. Oxygen consumption, thermoregulation and the effect of fur oiling and washing on the sea otter, Enhydra lutris. Can. J. Zool. 60: 2761-2767.

COSTA, D.P., and C.L. ORTIZ. 1982. Blood chemistry hemostasis during prolonged fasting in the northern elephant seal. Am. J. Physiol. 242: R591-R595.

COULSON, J.C., and C. HICKLING. 1964. The breeding biology of the grey seal, Halichoerus grypus, on the Farne Islands, Northumberland. J. Anim. Ecol. 33: 485-512.

COWAN, D.F. 1966. Pathology of the pilot whale. Arch. Pathol. 82: 178.

COWAN, D.F., W.A. WALKER, and R.L. BROWNELL. 1981. Reproductive bioenergetics of the northern fur seal, Callorhinus ursinus, p. 20. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

CRAIG, A.M. 1964. Histology of reproduction and estrus cycle in the female fur seal, Callorhinus ursinus. J. Fish. Res. Board Can. 21: 773-811.

CRAIG, A.M. 1966. Reproduction in the female fur seal, Callorhinus ursinus (Linn.). M.Sc. Thesis, University of British Columbia, Vancouver, BC.

CRANDALL, L.S. 1964. The management of wild mammals in captivity. University of Chicago Press, Chicago.

CRAWLEY, M.C., and D.L. BROWN. 1971. Measurements of tagged pups and a population estimate of New Zealand fur seals on Taumaka Open Bay Islands, Westland. N. Z. J. Mar. Freshwater Res. 5: 389-395.

CRAWLEY, M.C, J. STARK, and P. DODGSHUN. 1977. Activity budgets of New Zealand fur seals, Arctocephalus forsteri, during the breeding season. N. Z. J. Mar. Freshwater Res. 11: 777-788.

CREAC'H, P. 1955. Physiological properties of the saponifiable fraction of the oils of fish and whales. Oléagineux 10: 161-168.

CROXALL, J.P., and L. HIBY. 1983. Fecundity, survival and site fidelity in Weddell seals, Leptonychotes weddelli. J. Appl. Ecol. 20: 19-32.

CROXALL, J.P., and P.A. PRINCE. 1982. Calorific content of squid (Mollusca: Cephalopoda). Br. Antarct. Surv. Bull. 55: 27-32.

CRUMPTON, M.J. 1967. An antigenic site of sperm whale myoglobin. Nature (Lond.) 215: 17-20.

CUNNINGHAM, M.M. 1935. The vitamin D content of some New Zealand fish oils. With a note on prophylactic method of biological assay. N. Z. J. Sci. Technol. 17: 563-567.

CURRAN, M.P., and W.M. ASHER. 1974. Investigation of blubber thickness in a gray whale using ultrasonography. Mar. Fish. Rev. 36(4): 15-20.

CUSHING, J.E. 1961. Blood typing of marine animals. Nav. Res. Rev. 1961 (May): 8-11.

CUSHING, J.E. 1963. Blood groups and the systematics of marine animals (Pisces, whales). Proc. Int. Congr. Zool. 16: 123-124.

CUSHING, J.E. 1964. The blood groups of marine mammals. Adv. Mar. Biol. 2: 85-131.

CUSHING, J.E., K. FUJINO, and N. CALAPRICE. 1963. The JU blood-typing system of the sperm whale and specific soluble substances. Sci. Rep. Whales Res. Inst. Tokyo 17: 67.

DAMASCO, M.C., M.A. BORRUEL, and C.P. LANTOS. 1975. Chemical and biochemical properties of a steroid found in the suprarenal cortex of the Weddell seal. Contrib. Inst. Antarct. Argent. 187: 16 p. (In Spanish)

DAMASCO, M.C., F. DIAZ, and C.P. LANTOS. 1976. A biological effect of 18-hydroxy-corticosterone. Gen. Comp. Endocrinol. 29: 285.

DAMMERS, J. 1952. Condensed whale solubles as pig food. Conserva 1: 202-203.

D'ANGELO, G. 1982. Evidence for an erythrocyte transport system in the beluga whale, Delphinapterus leucas. Cetology 42: 1-9.

DANGERFIELD, W.G., R. FINLAYSON, G. MYATT, and M.G. MEAD. 1976. Lipoproteins and atherosclerosis in animals. Atherosclerosis 25: 95-106.

DANIEL, J.C. 1967. Preliminary studies on tne diapausing blastocyst of the northern fur seal. Am. Zool. 7: 757A.

DANIEL, J.C. 1968. Comparison of electrophoretic patterns of uterine fluids from rabbits and mammals having delayed implantation. Comp. Biochem. Physiol. 24: 297-300.

DANIEL, J.C. 1971a. Growth of the preimplantation embryo of the northern fur seal and its correlation with changes in uterine protein. Dev. Biol. 26: 316-322.

DANIEL, J.C. 1971b. Embryo dormancy in pinnipeds as characterized by the northern fur seal. J. Am. Vet. Med. Assoc. 158: 1873.

DANIEL, J.C. 1972. Blastokinin in the northern fur seal. Fertil. Steril. 23: 78-80.

DANIEL, J.C. 1974. Circulating levels of estradiol-17-β during early pregnancy in the Alaskan fur seal showing an estrogen surge preceding implantation. J. Reprod. Fertil. 37: 425-428.

DANIEL, J.C. 1975. Concentrations of circulating progesterone during early pregnancy in the northern fur seal, Callorhinus ursinus. J. Fish. Res. Board Can. 32: 65-66.

DANIEL, J.C. 1981. Delayed implantation in the northern fur seal (Callorhinus ursinus) and other pinnipeds. J. Reprod. Fertil. Suppl. 29: 35-50.

DANIEL, J.C., and R.S. KRISHNAN. 1969. Studies in the relationship between uterine fluid components and the diapausing state of blastocysts from mammals having delayed implantation. J. Exp. Zool. 172: 267-281.

DARGOLTZ, V.G., E.V. ROMANENKO, and V.E. SOKOLOV. 1978. Oxygen consumption by skin in dolphins and problem of cutaneous respiration in cetaceans. Zool. Zh. 57: 768-776. (In Russian)

DARLING, J.D. 1977. Aspects of the behavior and ecology of Vancouver Island gray whales, Eschrichtius glaucus Cope. M.Sc. Thesis, University of Victoria, Victoria, BC. 200 p.

DAVIS, J.E., and S.S. ANDERSON. 1976. Effects of oil pollution on breeding grey seals. Mar. Pollut. Bull. 7: 115-118.

DAVIS, R., and G.L. KOOYMAN. 1979. Diving energetics and intermediary metabolism in the harbor seal, Phoca vitulina, p. 12. In Symposium: biology of marine mammals, Abstracts. Presentations at the 3rd Biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

DAVIS, R.A. 1981. Report on a workshop on Arctic marine mammals. Can. Tech. Rep. Fish. Aquat. Sci. 1005: 13 p.

DAVIS, R.A., K.J. FINLEY, and W.J. RICHARDSON. 1980. The present and future management of Arctic marine mammals in Canada. Report No. 3, Science Advisory Board of the Northwest Territories, Yellowknife. 93 p.

DAVIS, R.A., W.R. KOSKI, and K.J. FINLEY. 1978. Numbers and distribution of walruses in the central Canadian High Arctic. Report by LGL Limited for Polar Gas Project. Toronto. 50 p.

DAVIS, R.W. 1980. Lactate and glucose metabolism in the resting and diving harbour seal (Phoca vitulina). Ph.D. Thesis, University of California, Davis, CA. (Diss. Abstr. Int. B. 41: 3700)

DAVIS, R.W., M.A. CASTELLINI, G.L. KOOYMAN, and R. MAUE. 1983. Renal filtration rate and hepatic blood flow during voluntary diving of Weddell seal, Leptonychotes weddelli. Am. J. Physiol. 245: R743-R748.

DAVSON, A., and L.T. GRAHAM (ed.) 1974. The eye. Comparative physiology. Vol. 6. Academic Press, New York, NY.

DAVYDOV, A.F., and A.R. MAKAROVA. 1965. Changes in heat regulation and circulation in newborn seals on transition to aquatic form of life. Fed. Proc. 24: T563-T566.

DAWBIN, W.H. 1955. Subantarctic marine food cycles and their relation to discontinuous plankton concentrations. N. Z. Ecol. Soc. Proc. 2: 19-20.

DAWE, J.C., and C.W. BERARD. 1971. Workshop on comparative pathology of hematopoietic and lymphoreticular neoplasms. J. Natl Cancer Inst. 47: 1365-1370.

DEAN, H.K. 1947a. Inventory of oils and fats II. SPC Soap Perfum. Cosmet. 20: 54-57.

DEAN, H.K. 1947b. Inventory of oils and fats. SPC Soap Perfum. Cosmet. 20: 865-867; 1213-1216.

DEARBORN, J.H. 1965. Food of Weddell seals at McMurdo Sound, Antarctica. J. Mammal. 46: 37-43.

DE BAAR, H.J.W., J.W. FARRINGTON, and S.G. WAKEHAM. 1983. Vertical flux of fatty acids in the north Atlantic Ocean. J. Mar. Res. 41: 19-41.

DEDYUKHINA, V.P., G.N. SAMBUROVA, L.A. GALUN, L.V. LENTSOVA, and S.A. KALUGINA. 1979. Characteristics of intramuscular lipids in whale meats. Vopr. Pitan. 4: 73-75. (In Russian)

DEDYUKHINA, V.P., G.N. SAMBUROVA, L.A. GALUN, L.V. LENTSOVA, and S.A. KALUGINA. 1980. Oxidation of myoglobin and lipids in defrosted whale meat. Izv. Vyssh. Uchebn. Zaved. Pishch. Tekhnol. 1: 13-15. (In Russian)

DEGERBØL, M., and P. FREUCHEN. 1935. Mammals. Report Fifth Thule Expedition, 1921-1924, Vol. 2(4-5).

DEBERBØL, M., and N.L. NIELSEN. 1930. Biological observations and measurements of the white whale, Delphinapterus leucas (Pall.)) and its fetus. Medd. Gronl. 77: 119-44.

DE HEUS, J.G., and T.J. DE MAN. 1951. The vitamin B_{12} content of some feeds. Voeding (The Hague) 12: 361-367.

DE IONGH, H., R.K. BEERTHUIS, C. DEN HARTOG, L.M. DALDERUP, and P.A.F. VAN DER SPEK. 1965. The influence of some dietary fats on serum lipids of man. Bibl. Nutr. Dieta 7: 137-152.

DE JONG, W.W., and M. GOODMAN. 1982. Mammalian phylogeny studied by sequence analysis of the eye lens protein, alpha-crystallin. Z. Saeugetierkd. 47: 257-276.

DELCOURT, R. 1969. Vertical electrophoresis of lipoproteins on acrylic gel (preliminary note). Ann. Biol. Clin. 27: 189-199.

DE LONG, R.L., W.G. GILMARTIN, and J.G. SIMPSON. 1973. Premature births in California sea lions. Association with high organochlorine pollutant residue levels. Science (Wash. DC) 181: 1168-1170.

DE MASTER, D.P. 1978. Estimation and analysis of factors that control a population of

Weddell seals (Leptonychotes weddelli) in McMurdo Sound, Antarctica. Ph.D. Thesis, University of Minnesota, Minneapolis, MN.

DE MASTER, D.P. 1979. Calculation of the average age of first reproduction in marine mammals, p. 12. In Symposium: biology of marine mammals, Abstracts. Presentations at the 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

DE MASTER, D.P., D.J. MILLER, D. GOODMAN, R.L. DE LONG, and B.S. STEWART. 1982. Assessment of California sea lion fishery interactions. Trans. N. Am. Wildl. Nat. Resour. Conf. 47: 253-264.

DE MONTE, T., and G. PILLERI. 1968a. Haemoglobin of Delphinus delphis and plasma-protein fractions in some species of the family Delphinidae determined by micro-electrophoresis on cellulose acetate gel. Blut 17: 25-30.

DE MONTE, T., and G. PILLERI. 1968b. Cetacea. XXII. Electrophoretic mobility of hemoglobin in Delphinus delphis, and observations on plasma protein fractions on some species of the family Delphinidae. Mar. Biol. (Berl.) 1: 178-181.

DE MONTE, T., and G. PILLERI. 1972. Haematological plasmic and urinary values of three species of cetaceans belonging to the family Platanistidae, Inia geoffrensis, Platanista indi and Platanista gangetica. Rev. Suisse Zool. 79: 235-252.

DENISOV, I.A. 1936. Khimicheski Sostov Zhirov Belukhi (Chemical composition of the fat of the beluga). (1835 ref. in Trudy VNIRO. 3 (1936))

DENTON, E.J. 1963. Buoyancy mechanisms of sea creatures. Endeavour 22: 3-8.

DEPARTMENT OF AGRICULTURE (U.S.) 1979. Marine mammals. Humane handling, care, treatment and transportation, rules and regulations. June 27, 1979, Part V. Fed. Regist. 44(122): 36868-36883.

DEPOCAS, F., J.S. HART, and H.D. FISHER. 1969. Sea water drinking and water balance on the harbour seal. Am. Zool. 9: 587.

DEPOCAS, F., J.S. HART, and H.D. FISHER. 1971. Sea water drinking and water flux in starved and in fed harbour seals, Phoca vitulina. Can. J. Physiol. Pharmacol. 49: 53-62.

DE ROOS, C.C., and H.A. BERN. 1961. Adrenal corticoids of the California sea lion. Gen. Comp. Endocrinol. 1: 275-285.

DESHIMARU, O., and K. SHIGENO. 1972. Introduction of the artificial diet for prawn Penaeus japonicus. Aquaculture 1: 115-133.

DHINDSA, D.S., J. METCALFE, A.S. HOVERLAND, and R.A. HARTMAN. 1974. Comparative studies of the respiratory functions of mammaliam blood. X. Killer whale (Orcinus orca) and beluga whale (Delphinaptera leucas). Respir. Physiol. 20: 93-103.

DIAMOND, S.S., C.P. RAFLO, M.H. BELEAU, and G.A. CALDWELL. 1980. Edema disease in a California sea lion. J. Am. Vet. Med. Assoc. 177: 808-810.

DOAN, K.H., and C.W. DOUGLAS. 1953. Beluga of the Churchill region of Hudson Bay. Bull. Fish. Res. Board Can. 98: 1-27.

DOBROWOLSKI, K.A. 1978. A report on the content of DDT in organs and tissues of a ringed seal, p. 46-47. In Symposium: conservation of Baltic seals Proceedings, April 26-28, 1977, Haikko, Finland. Riistatiet. Julk. 37.

DOGTEROM, J., F.G.M. SNIJDEWINT, P. PEVET, and D.F. SWAAB. 1980. Studies in the presense of vasopressin, oxytocin and vasotocin in the pineal gland, subcommissural organ and fetal pituitary gland: failure to demonstrate vasotocin in mammals. J. Endocrinol. 84: 115-123.

DOLBISH, G.A. 1955. The vitamin A content of the liver of marine mammals. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 43: 218-220. (In Russian)

DOLGOPOLSKAYA, M.A. 1964. The value of Black Sea decapod Crustacea in the feeding of fishes and dolphins. Tr. Sevastop. Biol. Stn Akad. Nauk Ukr. SSR 8: 214-219. Transl. available from NTIS as Rep. AD 713 795. (U.S. Gov. Res. Dev. Rep. 70(24): 39, 1970)

DOMART, C., D.T. MIYAUCHI, and W.N. SUMERWELL. 1955. The fractionation of marine oil fatty acids with urea. J. Am. Oil Chem. Soc. 32: 481-483.

DONALDSON, L.R., and R.F. FOSTER. 1939. Some experiments on the use of salmon viscera, seal meat, beef pancreas and apple flour in the diet of the young chinook salmon (Oncorhynchus tschawytscha). Prog. Fish-Cult. 44: 10-15.

DONKIN, P., S.V. MANN, and E.I. HAMILTON. 1977. Microcoulometric determination of total organochlorine pesticide and polychlorinated biphenyl residues in grey seal (Halichoerus grypus) blubber. Anal. Chim. Acta 88: 289-301.

DONKIN, P., S.V. MANN, and E.I. HAMILTON. 1981. Polychlorinated biphenyl, DDT and dieldrin residues in gray seal (Halichoerus grypus) males, females and mother-fetus pairs sampled at the Farne Islands, England, during the breeding season. Sci. Total Environ. 19: 121-142.

DORMER, J.K., M.J. DENN, and H.L. STONE. 1977. Cerebral blood flow in the sea lion (Zalophus californianus) during voluntary

dives. Comp. Biochem. Physiol. 58A: 11-18.

DORRANCE, M.J., and L.D. ROY. 1978. Aversive conditioning tests of black bears in bee-yard failed. Proc. Vertebr. Pest. Conf. 8: 251-254.

DOSAKO, S., S. TANEYA, T. KIMURA, H. OHMORI, H. DAIKOKU, N. SUZUKI, J. SAWA, K. KANO, and S. KATAYAMA. 1983. Milk of northern fur seal: composition, especially carbohydrate and protein. J. Dairy Sci. 66: 2076-2083.

DOSTER, W. 1983. Viscosity scaling and protein dynamics. Biophys. Chem. 17: 97-104.

DOUGLAS, C.W. 1951. Report on beluga investigations at Churchill in 1950. Fish. Res. Board Can. Manuscr. Rep. Biol. Sta. 485: 33 p.

DOUTT, J.K. 1940. Toxicity of polar bear liver. J. Mammal. 21: 356.

DOUTT, J.K. 1942. A review of the genus Phoca. Ann. Carnegie Mus. 29: 61-125.

DRESCHER, H.E. 1976. Organochlorines and heavy metals in the harbor seal (Phoca vitulina) from the German North Sea coast. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Fish. Improv. Comm. 1976 E: 16.

DRESCHER, H.E. 1978. Hautkrankheiten beim See-hund, Phoca vitulina Linné. 1758, in der Nordsee [Skin lesions in the harbor seal, Phoca vitulina Linn. 1758, from the North Sea]. Saeugetierkd. Mitt. 40: 50-59.

DRESCHER, H.E., U. HARMS, and E. HUSCHENBETH. 1977. Organochlorines and heavy metals in the harbour seal, Phoca vitulina, from the German North Sea coast. Mar. Biol. (Berl.) 41: 99-106.

DRUSE, D.H., G.L. KOOYMAN, and R.E. CARPENTER. 1975. Swimming metabolism of California sea lions (Zalophus californianus), p. 20. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st Conference on biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

DUBOIS, K.P., E.M.K. GEILING, A.F. MCBRIDE, and J.F. THOMSON. 1948. Studies on the intermediary carbohydrate metabolism of aquatic animals. I. The distribution of acid-soluble phosphorus and certain enzymes in dolphin tissues. J. Gen. Physiol. 31: 347-359.

DUFFIELD, D.A., S.H. RIDGWAY, and L.H. CORNELL. 1983. Hematology distinguishes coastal and offshore forms of dolphins, Tursiops. Can. J. Zool. 61: 930-933.

DUGAL, L.C., and L. RIOU. 1947a. La valeur nutritive des foies de loup-marin. Fish. Res. Board Can. Alt. Coast Stn Prog. Rep. 37: 9-10.

DUGAL, L.C., and L. RIOU. 1947b. Nutritive value of seal livers. Fish. Res. Board Can. Gaspe Fish. Exp. Stn Annu. Rep. 1947: Append. 23.

DUGGINS, D.O. 1980. Kelp beds and sea otters, Enhydra lutris. An experimental approach. Ecology 61: 447-453.

DUGUY, R., and P. BABIN. 1975. Intoxication aigue par les hydrocarbures observée chez un phoque veau-marin (Phoca vitulina). Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1975/N:5.

DUGUY, R., and P. BABIN. 1976. Acute hydrocarbon intoxication in a common seal, Phoca vitulina. Ann. Soc. Sci. Nat. Charente-marit. 6(3): 194-196.

DUINKER, J.C., and M.T.J. HILLEBRAND. 1979. Mobilization of organochlorines from female lipid tissue and transplacental transfer to fetus in a harbor porpoise (Phocoena phocoena) in a contaminated area. Bull. Environ. Contam. Toxicol. 23: 728-732.

DUINKER, J.C., and M.T.J. HILLEBRAND. 1979a. Mobilization of organochlorines from female lipid tissue and transplacental transfer to fetus in a harbor porpoise (Phocoena phocoena) in a contaminated area. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1979/E:39.

DUINKER, J.C., and M.T.J. HILLEBRAND. 1983. Composition of polychlorinated biphenyl mixtures in biotic and abiotic marine compartments, Dutch Wadden Sea. Bull. Environ. Contam. Toxicol. 31: 25-32.

DUINKER, J.C., M.T.J. HILLEBRAND, and R.F. NOLTING. 1979. Organochlorines and metals in harbour seals (Dutch Wadden Sea). Mar. Pollut. Bull. 10: 360-364.

DUNBAR, M.J. 1941. On the food of seals in the Canadian eastern Arctic. Can. J. Res. 19D: 150-155.

DUNBAR, M.J. 1949. The Pinnipidia of the Arctic and Subarctic. Bull. Fish. Res. Board Can. 85: 1-22.

DUNBAR, M.J. 1954. The status of the Atlantic walrus, Odobenus rosmarus (L.), in Canada. Arctic Circular 8: 11-14.

DUNBAR, M.J. 1968. Ecological development in polar regions. Prentice-Hall, Englewood Cliffs, NJ.

DUNBAR, M.J. 1973. Stability and fragility in Arctic ecosystem. Arctic 26: 179-185.

DUNBAR, M.J. 1977. The evolution of polar ecosystems, p. 1063-1076. In G.A. Llano (ed.) Adaptations within Antarctic ecosystems. Proceedings of the third symposium on Antarctic ecology. Gulf Publishing Company, Houston, TX.

DUNBAR, M.J. 1981. Physical causes and biological significance of polynyas and other open water in sea ice, p. 29-43. In I. Stirling and H. Cleator (ed.) Polynyas in the Canadian Arctic. Can. Wildl. Serv. Occas. Pap. 45.

DYCHE, L.L. 1903. Notes on the food habits of California sea lions (Zalophus californianus Lesson). Trans. Kans. Acad. Sci. 18: 179-182.

DYERBERG, J., and H.O. BANG. 1979. Lipid metabolism, atherogenesis and haemostasis in Eskimos: the role of prostaglandin 3-family. Haemostasis 8: 227-233.

DYERBERG, J., and H.O. BANG. 1979a. Haemostatic function and platelet polyunsaturated fatty acids in Eskimos. Lancet 1: 433.

DYERBERG, J., H.O. BANG, and N. HJØRNE. 1975. Fatty acid composition of the plasma lipids in Greenland Eskimos. Am. J. Clin. Nutr. 28: 958-966.

DYERBERG, J., H.O. BANG, and N. HJØRNE. 1977. Plasma cholesterol concentration in Caucasian Danes and Greenland west-coast Eskimos. Dan. Med. Bull. 24: 52-55.

DYERBERG, J., H.O. BANG, E. STOFFERSEN, S. MONCADA, and J.R. VANE. 1978. Eicosapentaenoic acid and prevention of thrombosis and artherosclerosis? Lancet 1: 117-119.

DYERBERG, J., and K.A. JORGENSEN. 1982. Marine oils and thrombogenesis. Prog. Lipid Res. 21: 225-269.

EADIE, J., and R.L. KIRK. 1952. The sodium and potassium concentration in the blood cells and plasma of the elephant seal. Aust. J. Sci. 15: 26-27.

EATON, C.A., R.G. ACKMAN, and P.F. BRODIE. 1977. Seal heart pathology with specific reference to docosenoic acid. Can. Fish. Mar. Serv. Tech. Rep. 724: 13 p.

EATON, R.D.P., D.C. SECORD, and P. HEWITT. 1980. An experimental assessment of the toxic potential of mercury in ringed seal liver for adult laboratory cats. Toxicol. Appl. Pharmacol. 55: 514-521.

ECKSTEIN, P., M.E. SHELESNYAK, and E.C. AMOROSO. 1959. A survey of the physiology of ovum implantation in mammals. Mem. Soc. Endocrinol. 6: 3-12.

EFREMOV, V.V. 1977. Vitaminology in the U.S.S.R. during the past 60 years development and achievement. Vopr. Pitan. 5: 34-44. (In Russian)

EGOROVA, N.I. 1964. Alteration of the content of vitamin A and kitol in liver of finback and sperm whales during storage. Sb. Rabot Tekknol. Rybn. Producktov, Kaliningrad: 132-149. (In Russian)

EGOROVA, N.I. 1968. Change in vitamin A level during the preservation of whole liver by γ-irradiation. Radiats. Obrab. Pishch. Prod. Dokl. Vses. Nauchno-Tekh. Konf. 230-237. (In Russian)

EGOROVA, L.N., and M.I. KRYUCHKOVA. 1967. Vitamin B_{12} content and chemical composition of some organs in whales. Tr. Vses. Nauchno-Issled. Inst. Morsk. Ryb. Khoz. Okeanogr. 63: 155-157. (In Russian)

EHIBOTOV, T.M. 1977. Age related characteristics of dentin and cement formation in tooth roots of the Caspian seal: a method of determining individual age. Izv. Akad. Nauk Az. SSR Ser. Biol. Nauk. 1977: 82-88. (In Russian)

EHRESMANN, D.W., and F.L. SCHAFFER. 1977. RNA synthesized in calicivirus-infected cells is atypical of picornaviruses. J. Virol. 22: 572-576.

EHRESMANN, D.W., and F.L. SCHAFFER. 1979. Calicivirus intracellular RNA: fractionation of 18-22S RNA and lack of typical 5'-methylated caps on 36S and 22S San Miguel sea lion virus RNA's. Virology 95: 251-255.

EICHELBERGER, L., E.S. FETCHER, E.M.K. GEILING, and B.J. VOS. 1940a. The distribution of water and electrolytes in the blood of dolphins. J. Biol. Chem. 133: 145-152.

EICHELBERGER, L., E.S. FETCHER, E.M.K. GEILING, and B.J. VOS. 1940b. The composition of dolphin milk. J. Biol. Chem. 134: 171-176.

EICHELBERGER, L., E.M.K. GEILING, and B.J. VOS. 1940. The distribution of water and electrolytes in skeletal muscle of the dolphin (Tursiops truncatus). J. Biol. Chem. 133: 661-666.

ELDEN, C.A., M.C. KEYES, and C.E. MARSHALL. 1971. Pineal body of the northern fur seal (Callorhinus ursinus): model for studying the probable function of the mammalian pineal body. Am. J. Vet. Res. 32: 639-647.

ELEY, T.J. Jr. 1976. Polar bear predation on ice inhabiting pinniped populations of Alaska, USA. Proc. Alaska Sci. Conf. 27: 236.

ELIZAROVA, G.P., L.I. KOLESNICHENKO, O.P. BOCHKOVA, and YU. A. PANKOV. 1982. Isolation and practical characterization of amino acid sequences of whale prolaction. Biokhimiya 47: 515-527. (Biochemistry 47: 433-445).

ELSNER, R. 1969. Cardiovascular adjustment to diving, p. 117-145. In H.T. Andersen (ed.) The biology of marine mammals. Academic Press, New York, NY.

ELSNER, R., J.E. ANGELL-JAMES, and M. DE BURGH DALY. 1977. Carotid body chemoreceptor

reflexes and their interactions in the seal. Am. J. Physiol. 232: H517-H525.

ELSNER, R., D.L. FRANKLIN, R.L. VAN CITTERS, and D.W. KENNEDY. 1966. Cardiovascular defenses against asphyxia. Science (Wash. DC) 153: 941-949.

ELSNER, R., D.D. HAMMOND, D.M. DENISON, and R. WYBURN. 1977a. Temperature regulation in the newborn Weddell Seal, Leptonychotes weddelli, p. 531-540. In G.A. Llano (ed.) Adaptations within Antarctic ecosystems. Smithsonian Institution, Washington, DC.

ELSNER, R., J.R. SHURLEY, D.D. HAMMON, and R.E. BROOKS. 1970. Cerebral tolerance of hypoxemia in asphyxiated Weddell seals. Respir. Physiol. 9: 287-297.

ENDERS, A.C. 1963. Delayed implantation. University of Chicago Press, Chicago.

ENGELHARDT, F.R. 1974. Aspects of vitamin E deprivation in the harp seal, Pagophilus groenlandicus. Ph.D. Thesis, University of Guelph, Guelph, ON. (Diss. Abstr. Ser. B. 35: 2335-B, 1975)

ENGELHARDT, F.R. 1976. An effective method for biopsy of tissue from phocid seals. Aquat. Mamm. 4: 58-59.

ENGELHARDT, F.R. 1977a. Plasma and tissue levels of dietary radiotocopherols in the harp seal, Phoca groenlandica. Can. J. Physiol. Pharmacol. 55: 601-608.

ENGELHARDT, F.R. 1977b. Immobilization of harp seals, Phoca groenlandica, by intravenous injection of ketamine. Comp. Biochem. Physiol. 52C: 75-76.

ENGELHARDT, F.R. 1977c. Adaptive temporal changes in harp seal, Phoca groenlandica, blood from new born to adult. Am. Zool. 17: 894A.

ENGELHARDT, F.R. 1977d. Changes in physical and chemical characteristics of blood in phocid seals as related to molt, p. 42. In Proceedings, second conference on biology of marine mammals, December 1977, San Diego, CA.

ENGELHARDT, F.R. 1978. Petroleum hydrocarbons in Arctic ringed seals, Phoca hispida, following experimental oil exposure, p. 613-628. Proceedings of the Conference on the assessment of ecological impacts of oil spills, Keystone, CO. American Institute of Biological Sciences, Washington, DC.

ENGELHARDT, F.R. 1979. Haematology and plasma chemistry of captive pinnipeds and cetaceans. Aquat. Mamm. 7: 11-20.

ENGELHARDT, F.R. 1979a. Functional roles of cortisol in phocid seals, p. 17. In Symposium: biology of marine mammals, Abstracts. Presentations at the 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

ENGELHARDT, F.R. 1982. Carbon metabolism and cortisol balance in oil-exposed ringed seal, Phoca hispida. Comp. Biochem. Physiol. 72C: 133-136.

ENGELHARDT, F.R. 1983. Petroleum effects on marine mammals. Aquat. Toxicol. (Amst.) 4: 199-218.

ENGELHARDT, F.R., and J.M. FERGUSON. 1980. Adaptive hormone changes in harp seals, Phoca groenlandica, and gray seals, Halichoerus grypus, during the post-natal period. Gen. Comp. Endocrinol. 40: 434-445; Aquat. Mamm. 7: 83-92, 1979.

ENGELHARDT, F.R., and J.R. GERACI. 1975. Uptake and distribution of tocopherols in the harp seal, Pagophilus groenlandicus. Am. Zool. 15: 822A.

ENGELHARDT, F.R., and J.R. GERACI. 1978. Effects of experimental vitamin E deprivation in the harp seal, Phoca groenlandica. Can. J. Zool. 56: 2186-2193.

ENGELHARDT, F.R., J.R. GERACI, and T.G. SMITH. 1977. Uptake and clearance of petroleum hydrocarbons in the ringed seal, Phoca hispida. J. Fish. Res. Board Can. 34: 1143-1147.

ENGELHARDT, F.R., J.R. GERACI, and B.L. WALKER. 1975. Tocopherol distribution in the harp seal, Pagophilus groenlandicus. Comp. Biochem. Physiol. 52B: 561-562.

ENGELHARDT, F.R., and B.L. WALKER. 1973. Fatty acid composition of the harp seal, Pagophilus groenlandica (Phoca groenlandica). Comp. Biochem. Physiol. 47B: 169-179.

EREMEEV, N. 1930. Five year plan of development of animal hunting in the U.S.S.R. and fat production. Rybn. Khoz. 6: 14-15. (In Russian)

ERICKSON, A.W., and R.J. HOFMAN. 1974. Antarctic seals. Am. Geogr. Soc. Antarct. Map Folio Ser. Folio 18: 4-12.

ERLINGE, S., and B. JENSEN. 1976. The diet of otters, Lutra lutra in Denmark. Nat. Jutl. 19: 161-165.

ESTES, J.A. 1977. Population estimates and feeding behaviour of sea otters, p. 511-526. In M.L. Merritt and R.G. Fuller (ed.) The environment of Amchitka Island, Alaska. (Available as TID-26712 from National Technical Information Service, Springfield, VA).

ESTES, J.A., R.J. JAMESON, and E.B. RHODE. 1982. Activity and prey selection in the sea otter, Enhydra lutris. Influence of population status on community structure. Am. Nat. 120: 242-258.

ESTES, J.A., N.S. SMITH, and J.F. PALMISANO. 1978. Sea otter predation and community organization in the western Aleutian Islands, Alaska. Ecology 59: 822-833.

EUBANKS, A.L., J.C. SPARKS, and M.R. PELTON. 1976. Selected chemical analysis of black bear serum. J. Tenn. Acad. Sci. 51: 29-31.

EVANS, D.E. 1959. Milk composition of mammals whose milk is not normally used for human consumption. Dairy Sci. Abstr. 21: 277.

EVANS, W.E. 1971. Orientation behavior of delphinids: radio telemetric studies. Ann. N.Y. Acad. Sci. 188: 142-160.

EVANS, W.E. 1973. Echolocation by marine delphinids and one species of fresh-water dolphin. J. Acoust. Soc. Am. 54: 191-199.

EVANS, W.E. 1974. Radio-telemetric studies of two species of small odontocete cetaceans, p. 385-394. In W.E. Schevill (ed.) The whale problem: a status report. Harvard University Press, Cambridge, MA.

EVANS, W.E., J.D. HALL, A.B. IRVINE, and J.S. LEATHERWOOD. 1972. Methods for tagging small cetaceans. U.S. Natl Mar. Fish. Serv. Fish. Bull. 70: 61-65.

EVERITT, R.D., P.J. GEARIN, J.S. SKIDMORE, and R.L. DE LONG. 1981. Prey items of harbor seals, Phoca vitulina, and California sea lions, Zalophus californianus, in Puget Sound, Washington, U.S.A. Murrelet 62: 83-86.

FAIRLEY, J.S. (ed.) 1972. Irish wild mammals: a guide to the literature. J.S. Fairley, Galway, Ireland.

FALCONER, C.R., I.M. DAVIES, and G. TOPPING. 1983. Trace metals in the common porpoise, Phocoena phocoena. Mar. Environ. Res. 8: 119-128.

FALLA, R.A. 1975. General observations of the seasonal cycle of the southern spider crab (Jacquinotia edwarsii) and its significance in the food cycle of Hooker's sea lion, p. 381-383. In E.C. Yaldwyn (ed.) Preliminary results of the Auckland Islands Expedition, 1972-1973. N.Z. Dep. Land Forests, Wellington. N.Z. Minist. Agric. Fish. Fish. Tech. Rep. 52.

FANGAUF, R., and R. DEDITIUS. 1934. Die Verfütterung von Walmehl an Legehennen. Arch. Geflügelk. 8: 383-391.

FARMER, A.S., and D. ROBERTS. 1971. On strandings of the grey seal, Halichoerus grypus (Fabricius), in the south of the Isle of Man. Rep. Port Erin Mar. Biol. Stn 83: 43-50.

FARMER, E.E. 1899. Report on the electrical experiments in the branding of the fur seal pups - season of 1877, p. 333-336. In D.S. Jordan (ed.) Special papers relating to the fur seal and to the natural history of the Pribilof Islands. (The fur seals and fur seal islands of the north Pacific Ocean, part 3.) U.S. Treas. Dep. Doc. 2017, U.S. Government Printing Office, Washington, DC.

FAUSETT, J. 1976. Assimilation efficiency of captive sea otters, Enhydra lutris. M.A. Thesis, California State University, Long Beach, CA.

FAY, F.H. 1952. The Pacific walrus. A progress report of field investigations conducted during 1952. Arct. Inst. N. Am. Proj. ONR-77, Manuscr.

FAY, F.H. 1957. History and present status of the Pacific walrus population. Trans. N. Am. Wildl. Conf. 22: 431-445.

FAY, F.H. 1960. Carnivorous walrus and some Arctic zoonoses. Arctic 13: 111-122.

FAY, F.H. 1974. The role of ice in the ecology of marine mammals of the Bering Sea, p. 383-399. In D.W. Hood and E.J. Kelley (ed.) Oceanography of the Bering Sea with emphasis on renewable resources. Institute of Marine Science, University of Alaska.

FAY, F.H. 1978. Belukha whale, p. 132-134. In D. Haley (ed.) Marine mammals of the eastern north Pacific and Arctic waters. Pacific Search Press, Seattle, WA.

FAY, F.H. 1981. Walrus - Odobenus rosmarus (Linnaeus, 1758), p. 1-23. In S.H. Ridgway and R.J. Harrison (ed.) Handbook of marine mammals. Vol. 1. The walrus, sea lions, fur seals and sea otter. Academic Press, New York, NY.

FAY, F.H. 1982. Ecology and biology of the Pacific walrus, Odobenus rosmarus divergens Illiger. N. Am. Fauna 74: 1-279.

FAY, F.M., H.M. FEDER, and S.W. STOKER. 1977. An estimation of the impact of the Pacific walrus populations on its food resources in the Bering Sea. U.S. Marine Mammal Comm. Rep. No. MMC-75/06 and MMC-74/03. U.S. Natl Tech. Inform. Serv. Rep. PB-273 505. 38 p.

FAY, F.H., and B.P. KELLY. 1980. Mass natural mortality of walruses, Odobenus rosmarus, at St. Lawrence Island, Bering Sea, Autumn, 1978. Arctic 33: 226-245.

FAY, F.H., and G.C. RAY. 1979. Reproductive behavior of the Pacific walrus in relation to population structure, p. 409-410. In B.R. Melteff (ed.) Alaska fisheries: 200 years and 200 miles of change. Proc. Alaska Sci. Conf. 29, 1978.

FAY, F.H., L.M. SHULTS, and R.A. DIETERICH. 1979. A field manual of procedures for postmortem examination of Alaskan marine mammals. Univ. Alaska, Inst. Mar. Sci. Rep. 79-1. (Univ. Alaska Inst. Arct. Biol. Occas. Publ. North. Life 3)

FEDAK, M.A., and S.S. ANDERSON. 1981. Energetics of reproduction in the grey seal, Halichoerus grypus, p. 33. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San

Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

FEDOSEEV, G.A. 1963. Maturation and rates of reproduction of the Okhotsk ringed seal, p. 113-117. In K.K. Chapskii (ed.) Morskie mlekopitayuschie (2nd All-Union Conference on the Study of Marine Mammals September 13, 1963, Leningrad). Akademiya Nauk SSSR, Moscow (In Russian)

FEDOSEEV, G.A. 1964. On the embryonic and post embryonic growth and sexual maturation in the Okhotsk ring seal. Zool. Zh. 43: 1228-1235. (In Russian)

FEDOSEEV, G.A. 1965. Feeding habits of the ringed seal (Pusa hispida Schr.). Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 59: 216-213. (In Russian)

FEDOSEEV, G.A. 1973. Biological description of and basis for the kill limit on bearded seals in the Sea of Okhotsk. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 86: 148-157. (Can. Fish. Mar. Serv. Transl. Ser. 3282, 1974. 18 p.)

FEDOSEEV, G.A. 1982. Range dynamics and ecological differentiation of Pacific walrus populations. Ekologiya (1): 45-51. (Sov. J. Ecol. 13: 42-47)

FELTZ, E.T., and F.H. FAY. 1966. Thermal requirements in vitro of epidermal cells from seals. Cryobiology 3: 261-264.

FERGUSON, J.H., and G.E. FOLK, Jr. 1971. Fatty acid levels in several species of Arctic carnivores. Comp. Biochem. Physiol. 40B: 309-312.

FERREN, H., and R.W. ELSNER. 1979. Diving physiology of the ringed seal: adaptions and implications, p. 379-387. In B.R. Meltoff (ed.) Alaska fisheries: 200 years and 200 miles of change. Proc. Alaska Sci. Conf. 29, 1978.

FETCHER, E.S. 1939. The water balance of marine mammals. Q. Rev. Biol. 14: 451-459.

FETCHER, E.S., and G.W. FETCHER. 1942. Experiments on the osmotic regulation of dolphins (Tursiops truncata). J. Cell. Comp. Physiol. 19: 123-130.

FINCH, V.A. 1965. Prospects of research into mother-infant relationships of the harbour seal in captivity, p. 38-40. In C.E. Rice (ed.) Symposium: biological sonar and diving mammals, Proceeding of the 2nd annual conference on the biological sonar and diving mammals, 17-18 May, 1965. Stanford Research Institute, Biological Sonar Laboratory, Fremont, CA.

FINER, B.L. 1954. Anaesthesia of the common seal. Anaesthesia 9: 34.

FINLEY, K.J. 1976. Studies of the status of marine mammals in the central District of Franklin, N.W.T., June-August, 1975. Report by LGL Ltd. for Polar Gas Project. 183 p.

FINLEY, K.J. 1978. Behaviour and densities of ringed seals (Phoca hispida) during haul out in the high Arctic, June 1977. Report by LGL Ltd. for Polar Gas Project. 107 p.

FINLEY, K.J. 1979. Haul-out behaviour and densities of ringed seals, Phoca hispida, in the Barrow Strait area, N.W.T. Can. J. Zool. 57: 1985-1997.

FINLEY, K.J., R.A. DAVIS, and W.J. RICHARDSON. 1974. Preliminary studies of the numbers and distribution of marine mammals in the central Canadian Arctic - 1974. Report by LGL Ltd. for Polar Gas Project. 68 p.

FINLEY, K.J., R.A. DAVIS, and H.B. SILVERMAN. 1980. Aspects of the narwhal hunt in the eastern Canadian Arctic. Int. Whaling Comm. Rep. Comm. 30: 459-464.

FINLEY, K.J., and C.R. EVANS. 1983. Summer diet of the bearded seal (Erignathus barbatus) in the Canadian high Arctic. Arctic 36: 82-89.

FINLEY, K.J., and E.J. GIBB. 1982. Summer diet of the narwhal (Monodon monoceros) in Pond Inlet, northern Baffin Island. Can. J. Zool. 60: 3353-3363.

FINLEY, K.J., and E.J. GIBB. In Press. Summer diet and feeding behaviour of harp seals in the Canadian high Arctic. In D.M. Lavigne et al. (ed.) The harp seal. Perspectives in vertebrate science. W. Junk, The Hague.

FINLEY, K.J., and W.G. JOHNSON. 1977. An investigation of the distribution of marine mammals in the vicinity of Somerset Island with emphasis on Bellot Strait, August-September 1976. Report by LGL Ltd. for Polar Gas Project. 91 p.

FINLEY, K.J., and G.W. MILLER. 1982. The 1979 hunt for narwhals (Monodon monoceros) and an examination of harpoon gun technology near Pond Inlet, northern Baffin Island. Int. Whaling Comm. Rep. Comm. 32: 449-460.

FINLEY, K.J., G.W. MILLER, M. ALLARD, R.A. DAVIS, and C.R. EVANS. 1982. The belugas, Delphinapterus leucas, of northern Quebec: distribution, abundance, stock identity, catch history and management. Can. Tech. Rep. Fish. Aquat. Sci. 1123: 57 p.

FINLEY, K.J., G.W. MILLER, R.A. DAVIS, W.R. KOSKI. 1983. A distinctive large breeding population of ringed seals, Phoca hispida, inhabiting the Baffin Bay pack ice. Arctic 36: 162-173.

FINLEY, K.J., and W.E. RENAUD. 1980. Marine mammals inhabiting the Baffin Bay north water in winter. Arctic 33: 724-738.

FIRTH, J.A., and R.M. HICKS. 1973. Interspecies variation in the fine structure

and enzyme cytochemistry of mammalian transitional epithelium. J. Anat. 116: 31-43.

FISCUS, C.H. 1980. Marine mammal salmonid interactions: a review, p. 121-132. In W.J. McNeil and D.C. Himsworth (ed.) Salmonid ecosystems of the north Pacific. Oregon State University Press, Corvallis, OR.

FISCUS, C.H., and G.A. BAINES. 1966. Food and feeding behavior of Steller and California sea lions. J. Mammal. 47: 195-200.

FISCUS, C.H., H. KAJIMURA, and R.K. STROUD. 1980. Food of the Pacific whitesided dolphin, Lagenorhynchus obliquidens, Dalls porpoise, Phocoenoides dalli, and northern fur seal, Callorhinus ursinus, off California and Washington, U.S.A. U.S. Natl Mar. Fish. Serv. Fish. Bull. 78: 951-959.

FISCUS, C.H., and V.B. SCHEFFER. 1962. Variety of food remains in stomachs of Steller sea lions. U.S. Fish. Wildl. Serv., Bur. Commer. Fish., Mar. Mamm. Biol. Lab., Unpubl. Manuscr. 13 p.

FISHER, A.K., C.L. SHALLA, and M.C. FISHER. 1975. Effects of temperature on oxygen consumption rates in Arctic seal tissues. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 501-503.

FISHER, H.D. 1952. The status of the harbour seal in British Columbia, with particular reference to the Skeena River. Bull. Fish. Res. Board Can. 93: 58 p.

FISHER, H.D. 1954. Delayed implantation in the harbour seal, Phoca vitulina L. Nature (Lond.) 173: 879.

FISHER, H.D. 1954a. Studies on reproduction in the harp seal, Phoca groenlandica (Erxleben), on the northeast Atlantic. Ph.D. Thesis, McGill University, Montreal, PQ.

FISHER, H.D. 1954b. Studies on reproduction in the harp seal, Phoca groenlandicus Erxleben, in the northwest Atlantic. Fish. Res. Board Can. Manuscr. Rep. Ser. 588: 109 p.

FISHER, H.D., and B.A. MACKENZIE. 1955. Food habits of seals in the maritimes. Fish. Res. Board Can. Prog. Rep. Atl. Coast Stn 61: 5-9.

FISHER, R.A., W. PUTT, and H. HARRIS. 1974. Further studies on erythrocyte inorganic pyrophosphatase. Examination of different mammalian species and human-Chinese hamster hybrid cells. Ann. Hum. Genet. 38: 171-178.

FITCH, J.E., and R.L. BROWNELL, Jr. 1971. Food habits of the Franciscana Pontoporia blainvillei, Cetacea, Platanistidae, from South America. Bull. Mar. Sci. 21: 626-636.

FLEGAL, A.R., M. STEPHENSON, M. MARTIN, and J.H. MARTIN. 1981. Elevated concentrations of mercury in mussels (Mytilus californianus) associated with pinniped colonies. Mar. Biol. (Berl.) 65: 45-48.

FLADMARK, M. 1951. Oil and food products from herring, whales and other sea animals. U.S. Patent 2,565,173. Aug. 21, 1951.

FLANAGAN, M.A., E.B. GARCIA-MORENCE, F.R.N. GURD, S.H. FRIEND, R. FELDMANN, and H. SCOULOUDI. 1983. Contribution of single amino acid residues to the structural stability of sperm whale myoglobin. 27th annual meeting of the Biophysical Society, San Diego, CA., USA, February 13-16, 1983. Biophys. J. 41(2 Part 2): 8A.

FLETEMEYER, J.R. 1978. Laminae in the teeth of the Cape fur seal used for age determination. Life Sci. 22: 695-698.

FLORKIN, M., and A.C. REDFIELD. 1931. On the respiratory function of the blood of the sea lion. Biol. Bull. (Woods Hole) 61: 422-426.

FLYGER, V. 1964. Succinylcholine chloride for killing or capturing whales. Nor. Hvalfangst Tid. 53(4): 88-90.

FLYGER, V., M.W. SCHIEN, A.W. ERICKSON, and T. LARSON. 1967. Capturing and handling polar bears - a progress report on polar bear ecological research. Trans. N. Am. Wildl. Nat. Resour. Conf. 32: 107-119.

FLYGER, V., M.S.R. SMITH, R. DAMM, and R.S. PETERSON. 1965. Effects of three immobilizing drugs on Weddell seals. J. Mammal. 46: 345-347.

FOGDEN, S.C.L. 1971. Mother-young behaviour at grey seal breeding beeches. J. Zool. (Lond.) 164: 61-62.

FOGG, G.E. 1970. Biological productivity in the Antarctic. Med. Biol. Illus. 20: 100-105.

FOGLIA, V.G., and J.C. PENHOS. 1954. Hormone content of the hypophysis of the finback whale, Balaenoptera physalus. Rev. Soc. Argent. Biol. 30: 222-233; C.R. Soc. Biol. Fil. 148: 2120-2122.

FOLKOW, B. 1982. Adaptation of circulation to diving (Abstract). Acta Physiol. Scand. Suppl. 1982(508): 10A.

FOLL, N.J. 1953. The nutritive value of whale meals. Fert. Feed. Stuffs Farm Supplies J. 40: 131-133.

FORD, J.E. 1964. A microbiological method for assessing the nutritive value of proteins. III. Further studies in the measurement of available amino acids. Brit. J. Nutr. 18: 449-460.

FORDYCE, R.E. 1982. Dental anomaly in a fossil squalodont dolphin from New Zealand and

the evolution of polydonty in whales. N.Z. J. Zool. 9: 419-426.

FORDYCE, R.E., R.H. MATTLIN, and R.J. WILSON. 1979. Stranding of a Cuvier's beached whale, Ziphius cavirostris, at New Brighton, New Zealand. Mauri Ora 7: 73-82.

FORESMAN, K.R., and J.C. DANIEL, Jr. 1983. Plasma progesterone concentrations in pregnant and non-pregnant black bears (Ursus americanus). J. Reprod. Fert. 68: 235-239.

FOWLER, C.W. 1980. Ecosystem models involving marine mammals. Appendix 1: 321-330. In C.W. Fowler, W.T. Bunderson, M.B. Cherry, R.J. Ryel and B.B. Steele. Comparative population dynamics of large mammals: a search for management criteria. U.S. Mar. Mamm. Comm., Wash., DC., Rep. MMC-77 20. U.S. Natl Tech. Inf. Serv. Rep. PB80-178627.

FOWLER, C.W. 1982. Interactions of northern fur seals, Callorhinus ursinus, and commercial fisheries. Trans. N. Am. Wildl. Nat. Resour. Conf. 47: 278-292.

FRAKER, M.A. 1978. The 1978 whale monitoring program MacKenzie estuary, N.W.T. F.F. Slaney and Co. Ltd., Vancouver, BC. 28 p.

FRAKER, M.A. 1979a. Spring migration of bowhead (Balaena mysticetus) and white whales (Delphinapterus leucas) in the Beaufort Sea. Can. Fish. Mar. Serv. Tech. Rep. 859: 36 p.

FRAKER, M.A., C.D. GORDON, J.W. McDONALD, J.K.B. FORD, and G. CAMBERS. 1979b. White whale (Delphinapterus leucas) distribution and abundance and the relationship to physical and chemical characteristics of the Mackenzie estuary. Can. Fish. Mar. Serv. Tech. Rep. 863: 56 p.

FRAKER, M.A., D.E. SERGEANT, and W. HOEK. 1978. Bowhead and white whales in the southern Beaufort Sea. Beaufort Sea Project Technical Report 4: 114 p.

FRANK, R., K. RONALD, and H.E. BRAUN. 1973. Organochlorine residues in harp seals, Pagophilus groenlandicus, caught in the eastern Canadian waters. J. Fish. Res. Board Can. 30: 1053-1063.

FRANZMANN, A.W., A. FLYNN, C.C. SCHWARTZ, D.G. CALKINS, and L. NICHOLS. 1981. Beta-endorphin levels in blood from select Alaskan mammals. J. Wildl. Dis. 17: 593-596.

FRAZER, J.F.D., and A.S. HUGGETT. 1973. Specific fetal growth rates of cetaceans. J. Zool. (Lond.) 169: 111-126.

FREDERIKHSEN, A.V. 1977. Identification of species of the genus Sebastes from bones found in the stomach of the sperm whale (Physeter catodon). Vopr. Ikhtiol. 17: 548-552. (J. Ichthyol. 17: 483-487)

FREDGA, K. 1976. Chromosomes and taxonomy. (Abstract) Zool. Scr. 5: 187.

FREEMAN, H.C., and D.A. HORNE. 1972. Mercury in Canadian seals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1972/N:9.

FREEMAN, H.C., and D.A. HORNE. 1973. Mercury in Canadian seals. Bull. Environ. Contam. Toxicol. 10: 172-181.

FREEMAN, H.C., G. SANGALANG, and J.F. UTHE. 1975a. A study of the effects of contaminants on steroidogenesis in Canadian gray and harp seals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1975/N:7.

FREEMAN, H.C., G. SANGALANG, J.F. UTHE, and K. RONALD. 1975. Steroidogenesis in vitro in the harp seal, Pagophilus groenlandicus, without and with methyl mercury treatment in vivo. Environ. Physiol. Biochem. 5: 428-439.

FREEMAN, M.M.R. 1968. Winter observations of beluga (Delphinapterus leucas) in Jones Sound, N.W.T. Can. Field-Nat. 82: 276-286.

FREEMAN, M.M.R. 1973. Polar bear predation on beluga in the Canadian Arctic. Arctic 26: 163-164.

FRIED, G.W., G.C. RAY, J.M. HILLER, S. RABINOW, and W. ANTOPOL. 1965. Shunt mechanism enzymes in the tissues of the Weddell Seal. Am. Zool. 5: 669-670.

FRIED, G.H., R. CARLETON, J. HILLER, S. RABINOW, and W. ANTOPOL. 1967. α-Glycerophosphate dehydrogenase and glucose-6-phosphate dehydrogenase in tissues of the Weddell seal. Science (Wash. DC) 155: 1560-1561.

FRIEND, D.W., and E.W. CRAMPTON. 1961. The adverse effect of raw whale liver on the breeding performance of female mink. J. Nutr. 73: 317-320.

FRISCH, J., and N.A. ORITSLAND. 1968. Insulative changes in the harp seal pup during molting. Acta Physiol. Scand. 74: 637-638.

FRITSCH, J., N.A. ORITSLAND, and J. KROG. 1974. Insulation of furs in winter. Comp. Biochem. Physiol. 47A: 403-410.

FROST, K.J., and L.F. LOWRY. 1980. Feeding of ribbon seals, Phoca fasciata, in the Bering Sea in spring. Can. J. Zool. 58: 1601-1607.

FROST, K.J., and L.F. LOWRY. 1981. Foods and trophic relationships of cetaceans in the Bering Sea, p. 825-836. In D.W. Hood and J.A. Calder (ed.) The eastern Bering Sea shelf: oceanography and resources. Vol. 2. University of Washington Press, Seattle, WA.

FROST, K.J., and L.F. LOWRY. 1981a. Ringed, Baikal and Caspian seals - Phoca hispida Schreber, 1775; Phoca sibirica Gmelin, 1788 and Phoca caspica Gmelin, 1788, p. 29-53. In S.H. Ridgway and R.J. Harrison (ed.) Handbook of marine mammals. Vol. 2. Seals. Academic Press, New York, NY.

FROST, K.J., and L.F. LOWRY. 1981b. Feeding and trophic relationships of bowhead whales and other vertebrate consumers in the Beaufort Sea, p. 39. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

FROST, K.J., L.F. LOWRY, and J.L. BURNS. 1978. Offshore demersal fishes and epibenthic invertebrates of the northwestern Chukchi and western Beaufort Seas. In Environmental Assessment of the Alaskan Continental Shelf. Annual Report of the Principal Investigations. Dec. 1979. Vol. 1. Receptors. U.S. National Oceanographic and Atmospheric Administration, Boulder, CO.

FROST, K.J., L.F. LOWRY, and J.J. BURNS. 1979. Ringed seals in the Alaskan Beaufort Sea: feeding patterns, trophic relationships and possible effects of offshore petroleum development, p. 22. In Symposium: biology of marine mammals, Abstracts. Presentations at the 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, W.A.

FROST, S.C. 1979. Regulation of nonshivering thermogenesis in brown adipose tissue. Ph.D. Thesis, University of Arizona. (Diss. Abstr. Int. B 40(2): 723)

FUJII, H. and H. MATSUMOTO. 1957. Sperm whale oil. IV. Purification of wax by lipase. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 19-23.

FUJII, H., H. MATSUMOTO, K. GOTO, and M. NAGATA. 1954a. Sperm whale oil. I. Molecular distillation of sperm blubber oil. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 6: 24-29.

FUJII, H., and S. OKURA. 1956a. Nutritive value of whale oil. V. Seborrhea caused by sperm whale oil and oxidized soya oil. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 7: 23-27.

FUJII, H., and S. OKURA. 1956b. Nutritive value of whale oil. VI. Nutritive value of hydrogenated whale oil with added essential fatty acid ester. Nippon Suisan Kabuskiki Kaisha Kenkyusho Hokoku 7: 28-30.

FUJII, H., S. OKURA, and H. MATSUMOTO. 1954b. Nutritive value of whale oil. I. Nutritive value of soft whale oil hydrogenated by Adkin's catalyst. Nippon Suisan Kabuskiki Kaisha Kenkyusho Hokoku 6: 1-9.

FUJII, H., S. OKURA, and M. MORI. 1956. Nutritive value of whale oil. IV. Comparison of nutritive value of glycerides and methyl esters. Nippon Suisan Kabuskiki Kaisha Kenkyusho Hokoku 7: 18-22.

FUJII, H., S. OKURA, and M. NAGATA. 1957. Sperm whale oil. V. Separation of wax and glyceride by the combination of molecular and high-vacuum distillations and their fatty acid compositions. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 24-34.

FUJINO, K. 1954. On the serological constitution of the sperm and Baird beaked whales. I. Blood groups of the sperm and Baird beaked whales. Sci. Rep. Whales Res. Inst. Tokyo 9: 105-120.

FUJINO, K. 1962. Blood types of some species of Antarctic whales. Am. Nat. 96: 205-210.

FUJINO, K., and J.E. CUSHING. 1960. Blood types in fur seals. Science (Wash. DC) 131: 1310.

FURNELL, D.J., and D. OOLOOYUK. 1980. Bear, Ursus maritimus, predation on ringed seals, Phoca hispida, in ice-free water. Can. Field-Nat. 94: 88-89.

FURUHASHI, Y. 1927. Untersuchungen über Cetacea. XVIII. Über den Gesamtblasengehalt des Harns. Jpn. J. Med. Sci. Trans. II. Biochem. 1: 135-136.

GALANTSEV, V.P., I.M. STOSMAN, V.I. SHERESHKOV, A.G. KUPIN, and V.V.A. PROTASO. 1983. Ecological physiological peculiarities of heart activity in the Caspian seal, Pusa caspica. Zool. Zh. 62: 280-286. (In Russian)

GALE, C.C. 1973. Neuroendocrine aspects of thermoregulation. Annu. Rev. Physiol. 35: 291-430.

GALLIEN, C.L., M.T. CHALUMEAU-LE FOULGOC, and J.M. FINE. 1967. Serum proteins of Delphinus delphis. C.R. Hebd. Seanc. Acad. Sci. Ser. D. Sci. Nat. 264: 1359-1362.

GALLIEN, C.L., M.T. CHALUMEAU-LE FOULGOC, and J.M. FINE. 1970. Comparative study of serum proteins of four dolphin species. Comp. Biochem. Physiol. 37: 375-385.

GALLIVAN, G.J. 1977. Temperature regulation and respiration in the freely diving harp seal (Phoca groenlandica). M.Sc. Thesis, University of Guelph, Guelph, ON.

GALLIVAN, G.J., and K. RONALD. 1979. Temperature regulation in freely diving harp seals (Phoca groenlandica). Can. J. Zool. 57: 2256-2263.

GALLIVAN, G.J., and K. RONALD. 1981. Apparent specific dynamic action in the harp seal, Phoca groenlandica. Comp. Biochem. Physiol. 69A: 579-582.

GALSTER, W.A. 1976. Mercury in Alaskan Eskimo mothers and infants. Environ. Health Perspect. 15: 135-140.

GALSTER, W.R. 1971. Accumulation of mercury in Alaska pinnipeds. Proc. Alaska Sci. Conf. 22: 76A.

GALSTER, W.R., and J.T. BURNS. 1972. Accumulation of pesticides in Alaskan marine mammals. Proc. Alaska Sci. Conf. 22: 23.

GAMBELL, R. 1968. Seasonal cycles and reproduction in sei whales of the southern hemisphere. Discovery Rep. 35: 31-134.

GAMBELL, R. 1970. Weight of a sperm whale and in parts. S. Afr. J. Sci. 66: 225-227.

GAMBLE, D.I. 1979. Arctic offshore developments: the circumpolar challenge. Northern Perspectives 7: 1-4.

GARIBALDI, L., J.C. SWEENEY, D.K. ODELL, and E.D. ASPER. 1979. Pinniped and sirenian beachings, p. 75-81. In J.R. Geraci and D.J. St. Aubin. Biology of marine mammals: insights through strandings. U.S. Mar. Mamm. Comm., Rep. MMC-77-13. U.S. Natl Tech. Inf. Serv. Rep. PB-293890.

GARMAN, R.H., M.J. NUZZI, and J.R. GERACI. 1983. Cutaneous gout in an Amazon dolphin. J. Am. Vet. Med. Assoc. 183: 1292-1293.

GARNER, M.H., W.H. GARNER, and F.R.N. GURD. 1973. Determination of α-amino acid pK by cyanate reaction: cation to peptides and myoglobins. J. Biol. Chem. 248: 5451-5455.

GARTON, G.A., T.P. HILDITCH, and M.L. MEARA. 1952. The composition of the depot fats of a pig fed on diet rich in whale oil. Biochem. J. 50: 517524.

GASKIN, D.E. 1972. Whales, dolphins and seals. St. Martin's Press, New York, NY. 200 p.

GASKIN, D.E. 1978. Form and function in the digestive tract and associated organs in Cetacea, with a consideration of metabolic rates and specific energy budgets. Oceanogr. Mar. Biol. Annu. Rev. 16: 313-345.

GASKIN, D.E. 1982. The ecology of whales and dolphins. Heinemann, London.

GASKIN, D.E., R. FRANK, M. HOLDRINET, K. ISHIDA, C.J. WALTON, and M. SMITH. 1973. Mercury, DDT and PCB (polychlorinated biphenyls) in harbour seals (Phoca vitulina) from Bay of Fundy and Gulf of Maine. J. Fish. Res. Board Can. 30: 471-475.

GASKIN, D.E., K. ISHIDA, and R. FRANK. 1962. Mercury in harbour porpoises (Phocoena phocoena) from the Bay of Fundy region. J. Fish. Res. Board Can. 29: 1644-1646.

GASKIN, D.E., G.J.D. SMITH, P.W. ARNOLD, M.V. LOUISY, R. FRANK, M. HOLDRINET, and J.W. McWADE. 1974. Mercury DDT, dieldrin and PCB in two species of Odontoceti (Cetacea) from St. Lucia, Lesser Antilles. J. Fish. Res. Board Can. 31: 1235-1239.

GASKIN, D.E., G.J.D. SMITH, and A.P. WATSON. 1975. Preliminary study of movements of harbour porpoises, Phocoena phocoena, in the Bay of Fundy using radiotelemetry. Can. J. Zool. 53: 1466-1471.

GASKIN, D.E., K.I. STONEFIELD, P. SUNDA, and R. FRANK. 1979. Changes in mercury levels in harbour porpoises from the Bay of Fundy, Canada, and adjacent waters during 1969-1977. Arch. Environ. Contam. Toxicol. 8: 733-762.

GAVRILENKO, N.M. 1952. Vitamin A content of the liver of some Chukchi mammals and birds. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 37: 261-269. (In Russian)

GELENTYUK, V.Z., M.K. MAMINOV, and E.M. ANBINDER. 1972. Some properties of the blood of sea otter, two species of true seals and terrestrial carnivores, p. 54-63. In Morskii mlekopitayushchie (Fifth All-Union Conf. Study Mar. Mamm. 19-21 Sept. 1972 Makhachkhala). Akad. Nauk SSSR Zool. Inst. Evol. Morfol. Ekol. Zhivotn. Inst. Biol. Razrit. Minist. Rybn. Khoz. SSSR Ikhtiol. Kom. VNIRO Kasp. (In Russian)

GENOWAYS, H.H., and J.R. CHOATE. 1976. Federal regulations pertaining to collection, import, export and transport of scientific specimens of mammals. J. Mammal. 57 (Suppl.): 1-9.

GENTRY, R.I. 1973. Thermoregulatory behaviour of eared seals. Behaviour 46: 73-93.

GENTRY, R.L. 1981. Sea water drinking by eared seals. Comp. Biochem. Physiol. 68A: 81-86.

GENTRY, R.L. 1981a. Northern fur seal - Callorhinus ursinus (Linnaeus, 1758), p. 143-160. In S.H. Ridgway and R.J. Harrison (ed.) Handbook of marine mammals. Vol. 1. The walrus, sea lions, fur seals and sea otter. Academic Press, New York, NY.

GENTRY, R.L., J.R. HOLT, and C.B. HEATH. 1981. Estrus in the northern fur seal, p. 44. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

GENTRY, R.L., and J.H. JOHNSON. 1978. Physical restraint for immobilizing fur seals. J. Wildl. Manage. 42: 944-946.

GENTRY, R.L., and J.H. JOHNSON. 1981. Predation by sea lions, Eumatopias jubatus, on northern fur seal, Callorhinus ursinus, neonates. Mammalia 45: 423-430.

GEORGE, J.C. 1974. Structural and metabolic adaptations in avian and seal muscle, p. 27-34. In Canadian Society of Zoologists, Proceedings of Annual Meeting, June 2-5, 1974.

GEORGE, J.C., and K. RONALD. 1973. The harp seal, Pagophilus groenlandicus (Erxleben, 1777) 25. Ultrastructure and metabolic adaptation of skeletal muscle. Can. J. Zool. 51: 833-839.

GEORGE, J.C., and K. RONALD. 1975. Metabolic adaptation in pinniped skeletal muscle. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 432-436.

GEORGE, J.C., N.V. VALLYATHAN, and K. RONALD. 1971. The harp seal, Pagophilus groenlandicus (Erxleben, 1777). VII. A histophysiological study of certain skeletal muscles. Can. J. Zool. 49: 25-30.

GEORGE, J.L., and D.E.H. FREAR. 1966. Pesticides in the Antarctic, p. 155-167. In N.W. Moore (ed.) Pesticides in the environment and their effect on wildlife, Proceedings. Blackwell Scientific, Oxford. (J. Appl. Ecol. 3(Suppl.))

GEORGE, R.Y., and A.Z. PAUL. 1970. USC-FSU biological investigations from the Fletcher's ice island T-3 on deep-sea and under-ice benthos of Arctic Ocean. University of Southern California, Department of Biological Sciences, Technical Report No. 1.

GERACI, J.R. 1968. Diet-induced thiamine deficiency in captive marine mammals, p. 137-144. In D.K. Caldwell and M.C. Caldwell (ed.) Symposium: diseases and husbandry of aquatic mammals, Proceedings. 2nd Symposium, Feb. 21-22, 1968. Florida Atlantic University, Boca Raton, FL.

GERACI, J.R. 1970. The effects of thiaminase ingestion on the harp seal, Pagophilus groenlandicus. Ph.D. Thesis, McGill University, Montreal, PQ. (Diss. Abstr. 31(6): 6102-B)

GERACI, J.R. 1971. Functional hematolgoy of the harp seal, Pagophilus groenlandicus. Physiol. Zool. 44: 162-170.

GERACI, J.R. 1972a. Experimental thiamine deficiency in captive harp seals, Phoca groenlandica, induced by eating herring, Clupea harengus, and smelts, Osmerus mordax. Can. J. Zool. 50: 179-195.

GERACI, J.R. 1972b. Hyponatremia and the need for dietary salt supplementation in captive pinnipeds. J. Am. Vet. Med. Assoc. 161: 618-623.

GERACI, J.R. 1973. An appraisal of ketamine as an immobilizing agent in wild and captive pinnipeds. J. Am. Vet. Med. Assoc. 163: 574-577.

GERACI, J.R. 1974. Thiamine deficiency in seals and recommendations for its prevention. J. Am. Vet. Med. Assoc. 165: 801-803.

GERACI, J.R. 1975. Pinniped nutrition. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 312-323.

GERACI, J.R. 1976. Direct and indirect effects of oil on ringed seals (Phoca hispida) of the Beaufort Sea. J. Fish. Res. Board Can. 33: 1976-1984.

GERACI, J.R. 1977. Marine mammal care. Department of Pathology, Ontario Veterinary College, University of Guelph, ON.

GERACI, J.R. 1978. Marine mammals (Cetacea, Pinnipedia and Sirenia), p. 536-572. In M.K. Fowler (ed.) Zoo and wild animal medicine. W.B. Saunders, Toronto, ON.

GERACI, J.R. 1978a. Nutrition and nutritional disorders, p. 568-572. In M.E. Fowler (ed.) Zoo and wild animal medicine. W.B. Saunders, Toronto, ON.

GERACI, J.R. 1981. Handbook on marine mammal care. 2nd ed. Ontario Veterinary College, University of Guelph, ON.

GERACI, J.R. 1981a. Dietary disorders in marine mammals: synthesis and new findings. J. Am. Vet. Med. Assoc. 179: 1183-1191.

GERACI, J.R., and F.R. ENGELHARDT. 1974. The effects of storage time, temperature and anticoagulants on harp seal, Phoca groenlandica, hemograms: a simulated field study. Physiol. Zool. 47: 22-28.

GERACI, J.R., and K.E. GERSTMANN. 1966. Relationship of dietary histamine to gastric ulcers in the dolphin. J. Am. Vet. Med. Assoc. 149: 884-890.

GERACI, J.R., and M.C. KEYES. 1970. Veterinary medicine in the conservation and management of marine mammal resources. J. Am. Vet. Med. Assoc. 157: 1970-1974.

GERACI, J.R., G. LETELIER, and W. MEDWAY. 1969. Serum constituents of the beluga whale compared to those of the bottle-nosed dolphin, p. 75-87. In D.K. Caldwell (ed.) Proceedings of the 2nd symposium on diseases and husbandry of aquatic mammals, 1968. Florida Atlantic University, Boca Raton, FL.

GERACI, J.R., and W. MEDWAY. 1973. Simulated field blood studies in the bottle-nosed dolphin, Tursiops truncatus. 2. Effect of stress on some hematologic and plasma chemical parameters. J. Wildl. Dis. 9: 29-33.

GERACI, J.R., and W. MEDWAY. 1974. Simulated field studies in the bottle-nosed dolphin, Tursiops truncatus. 3. Changes in hematology and chemistry during blood and plasma storage. J. Wildl. Dis. 10: 410-419.

GERACI, J.R., W. MEDWAY, H. FINK, and B. BECK. 1969a. Studies on the haematology of the

beluga whale. In D.K. Caldwell (ed.) Proceedings of the 2nd symposium on diseases and husbandry of aquatic mammals, 1968. Florida Atlantic University, Boca Raton, FL.

GERACI, J.R., K. SKIRNISSON, and D.J. ST. AUBIN. 1981. A safe method for repeatedly immobilizing seals. J. Am. Vet. Med. Assoc. 179: 1192-1193.

GERACI, J.R., and T.G. SMITH. 1975. Functional hematology of ringed seals, Phoca hispida, in the Canadian Arctic. J. Fish. Res. Board Can. 32: 2559-2564.

GERACI, J.R., and T.G. SMITH. 1976. Direct and indirect effects of oil on ringed seals (Phoca hispida) of the Beaufort Sea. J. Fish. Res. Board Can. 33: 1976-1984.

GERACI, J.R., and T.G. SMITH. 1977. Consequences of oil fouling on marine mammals, p. 399-410. In D. Malins (ed.) Effects of petroleum on Arctic and subarctic marine environments and organisms. Vol 2. Biological effects. Academic Press, New York, NY.

GERACI, J.R., and T.G. SMITH. 1977a. Behaviour and pathophysiology of seals exposed to crude oil, p. 447-472. In Sources and effect of sinks on the hydrocarbon in the aquatic environment, Proceedings of the Symposium 1976. American Institute of Biology, Arlington, VA.

GERACI, J.R., and T.G. SMITH. 1979. Vitamin C in the diet of Inuit hunters from Holman Northwest Territories, Canada. Arctic 32: 135-139.

GERACI, J.R., and D.J. ST. AUBIN. 1979. Tissue sources and diagnostic value of circulating enzymes in cetaceans. J. Fish. Res. Board Can. 36: 158-163.

GERACI, J.R., and D.J. ST. AUBIN. 1979a. Stress and disease in the marine environment: insights through strandings, p. 223-233. In J.R. Geraci and D.J. St. Aubin. Biology of marine mammals: insights through strandings. U.S. Mar. Mamm. Comm., Rep. MMC-77 13. U.S. Natl Tech. Inf. Serv. Rep. PB-293890.

GERACI, J.R., and D.J. ST. AUBIN. 1979b. Stranding workshop summary report, p. 1-33. In J.R. Geraci and D.J. St. Aubin. Biology of marine mammals: insights through strandings. U.S. Mar. Mamm. Comm., Wash., DC., Rep., MMC-77 13. U.S. Natl Tech. Inf. Serv. Rep. PB-293890.

GERACI, J.R., and D.J. ST. AUBIN. 1979c. Biology of marine mammals: insights through strandings. U.S. Mar. Mamm. Comm., Wash., D.C., Rep., MMC-77 13. U.S. Natl Tech. Inf. Serv. Rep. PB-293890: 343 p.

GERACI, J.R., and D.J. ST. AUBIN. 1980. Offshore petroleum resource development and marine mammals. A review and research recommendation. Mar. Fish. Rev. 42(11): 1-12.

GERACI, J.R., D.J. ST. AUBIN, and R.J. REISMAN. 1983. Bottlenose dolphins, Tursiops truncatus, can detect oil. Can. J. Fish. Aquat. Sci. 40: 1516-1522.

GERACI, J.R., D.J. ST. AUBIN, and T.G. SMITH. 1979. Influence of age, condition, sampling time and method on plasma chemical constituents in free-ranging ringed seals, Phoca hispida. J. Fish. Res. Board Can. 36: 1278-1282.

GERACI, J.R., and J. SWEENEY. 1978. Clinical techniques, p. 580-587. In M.E. Fowler (ed.) Zoo and wild animal medicine. W.B. Saunders, Toronto, ON.

GERACI, J.R., S.A. TESTAVERDE, D.J. ST. AUBIN, and T.H. LOOP. 1978. A mass stranding of the Atlantic white-sided dolphin, Lagenorhynchus acutus: a study into pathobiology and life history. U.S. Natl Tech. Inf. Serv. Rep. PB-289361: 166 p.

GERSHBEIN, L.L., and E.J. SINGH. 1964. Liver lipids of the polar bear, Thalarctos maritimus. Lipids 5: 469-474.

GESCHWIND, I.I. 1966. Chemistry of the melanocyte-stimulating hormones, p. 28-44. In Structure and control of the melanocyte, 25-29 May, 1965, Sofia, Bulgaria. Springer Verlag, New York, NY.

GIBBNEY, L.F. 1953. Delayed implantation in the elephant seal. Nature (Lond.) 172: 590.

GILBERT, W.A., J. KURUJAN, G.A. PETSKO, and D.R. PONZI. 1982. Mapping the spatial distribution of protein fluctuations by x-ray diffractions, p. 405-420. In E. Clementi and R.H. Sarma (ed.) Structure and dynamics: nucleic acid and proteins; Proceedings of the international symposium, La Jolla, CA, U.S.A., September 5-9, 1982. 487 p. Adeni Press, Guilderland, NY.

GILL, A.H., and C.M. TUCKER. 1930. Composition of porpoise jaw oil. Oil Fat Ind. 7: 101-102.

GILL, C.D., and S.E. HUGHES. 1971. A sei whale, Balaenoptera borealis, feeding on Pacific saury, Cololabis saira. Calif. Fish Game 57: 218-219.

GILL, R.E., and J.D. HALL. 1983. Use of nearshore and estuarine areas of the southeastern Bering Sea by gray whales (Eschrichtius robustus). Arctic 36: 275-281.

GILL, T.N., and E. COUES. 1877. Material for a bibliography of North American mammals. U.S. Government Printing Office, Washington, DC, p. 951-1081. (Reprinted by Arno Press, New York, 1974)

GILMARTIN, W.G., and R.J. MORROW. 1981. Captive maintenance of Hawaiian monk seal

(Monachus schauinsland) pups to aid in definition of causes of mortality and potentially enhance survival, p. 45. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

GILMARTIN, W.G., R.W. PIERCE, and G.A. ANTONELIS, Jr. 1974. Some physiological parameters of the blood of the California gray whale. Mar. Fish. Rev. 36(4): 28-31.

GILMARTIN, W.G., J.C. SWEENEY, and R.D. GUNNELS. 1975. Effects of certain environmental pollutants on the Californian sea lion. U.S. Mar. Mamm. Comm., Wash. DC, Final Rep. Contract No. MM5AC014. 21 p.

GINATULINA, L.K., A.A. GINATULIN, and N.N. VORONTSOV. 1980a. The molecular structure of mammalian genome. Genetica (The Hague) 52-53; 127-138.

GINATULINA, L.K., A.A. GINATULIN, and N.N. VORONTSOV. 1980b. The molecular structure of the mammalian genome, p. 127-138. In N.N. Vorontsov and J.M. Van Brink (ed.) Animal genetics and evolution; Selected papers of the 14th international congress of genetics, 1978. W. Junk, The Hague.

GITLIN, D., and M. BOESMAN. 1967. Fetus-specific serum proteins of several mammals and their relations to human A-fetoprotein. Comp. Biochem. Physiol. 21: 327-336.

GLASS, R.L., and R. JENNESS. 1971. Comparative biochemical studies of milk. 6. Constituent fatty acids of milk fats of additional species. Comp. Biochem. Physiol. 38B: 353-359.

GLASS, R.L., H.A. TROOLIN, and R. JENNESS. 1967. A comparative biochemical studies of milks. 4. Constituent fatty acids of milk fats. Comp. Biochem. Physiol. 22: 415-425.

GLAZOVA, T.N. 1972. Physiological-biochemical characteristics of the blood of Greenland seal, Pagophilus groenlandicus (Erxleben 1777), pups, p. 6366. In Morskii mlekopitayushchie, (Fifth All-Union Conf. Study Mar. Mamm., Makkachkala, 19-21 Sept., 1972). Makhachkala: Akad. Nauk SSSR Zool. Inst., Inst. Evol. Morfol. Ekol. Zhivotn, Inst. Biol. Razrit.; Minist. Rybn. Khoz. SSSR. Ikhtiol. Kom. VNIRO Kasp. (In Russian)

GLAZOVA, T.N. 1977. Physiological and biochemical blood indices in the harp seal, Pagophilus groenlandicus. Zh. Evol. Biokhim. Fiziol. 13: 362-366. (In Russian)

GLAZOVA, T.N. 1978. Physiological and biochemical characteristics of the blood of the Greenland seal, Pagophilus groenlandicus. J. Evol. Biochem. Physiol. 13: 220-224. (English translation of Glazova 1977)

GODFREY, N.W. 1977. Replacement of meat and bone meal with whale meal or whale solubles in pig diets and the accumulation of mercury in the carcase. Aust. J. Exp. Agric. Anim. Husb. 17: 403-411.

GOLD, J.P. 1981. Marine mammals: a selected bibliography. U.S. Mar. Mamm. Comm. Washington, DC, Rep., MMC-81 03. U.S. Natl Tech. Inf. Serv. Rep. PB82104282: 91 p.

GOLDBLATT, C.J., and R.G. ANTHONY. 1983. Heavy metals in northern fur seals (Callorhinus ursinus) from the Pribilof Islands, Alaska. J. Environ. Qual. 12: 478-482.

GOL'DANSKII, V.I., Y.M. RUMYANTSEV, A.V. SHISHKOV, L.A. BARATOVA, and L.P. BELYANOVA. 1982. Three dimensional structure of proteins studied by tritium labelling. 2. Intramolecular distribution of tritium in the amino terminal region of myoglobin and tertiary structure of proteins. Mol. Biol. (Engl. Transl. Mol. Biol. (Moscow)) 16: 417-421.

GOLDFISCHER, S. 1967. The cytochemical localization of myoglobin in striated muscle of man and walrus. J. Cell. Biol. 34: 398-403.

GOLDING, J., and W.B. MORRIS. 1926. Whale meat products as food for pigs. J. Minist. Agric. (G.B.) 33: 411-425.

GOLDSBERRY, D.G., E.D. ASPER, and L.H. CORNELL. 1976. Live capture techniques for the killer whale, Orcinus orca, and live capture fishery statistics, 1961-1976. Report to subcommittee, small cetaceans. Science Committee of the International Whaling Commission, London, England. 13 p.

GOLOVIN, A.N. 1962. Refractometer method for fat determination in whale meat. Rybn. Khoz. 38: 72-74.

GOL'TSEV, V.N. 1971. Feeding of the harbour seal. Ekologiya 2: 62-70. (Sov. J. Ecol. 2: 137-143)

GOODALE, D.R., M.A. HYMAN, and H.E. WINN. 1981. Cetacean responses in association with the Regal Sword oil spill, Chap. 11, p. 1-6. In cetacean and turtle assessment programme. University of Rhode Island. Annual Report for 1979. U.S. Department of the Interior, Washington, DC.

GOODMAN, M., G.W. MOORE, and G. MATSUDA. 1975. Darwinian evolution in the genealogy of haemoglobins. Nature (Lond.) 253: 603-608.

GOSS, D.J., J.B. LAGOW, and L.J. PARKHURST. 1982. Kinetics of ligand binding for diverse mammalian myoglobin and the effects of substitutions outside the heme cavity. Comp. Biochem. Physiol. 71B: 229-234.

GOUW, T.H., and J.C. VLUGTER. 1967. Physical properties of triglycerides - III. Ultra-

sonic sound velocity. Fette Seifen Anstrichm. 69: 159-163.

GRAINGER, E.H., S.I.C. HSIAO, R. TRUCCO, A.A. MOHAMMED, R. ROBINSON, J.A. PERCY, F.J. FIFE, and J.W. ATKINSON. 1980. A marine biological study of Brevoort Harbour and nearby waters of eastern Baffin Island, Canada. Can. Manuscr. Rep. Fish. Aquat. Sci. 1557: xiv + 280 p.

GRAV, H.J. 1981. Cellular thermogenesis and marine mammals, p. 297-304. In G. Pethes and V.L. Frenyo (ed.) Advances of physiological sciences, proceedings of the international congress, 28th 1980, 20. Akad. Kiado, Budapest (Adv. Anim. Comp. Physiol.)

GRAV, H.J., and A.S. BLIX. 1976. Brown adipose tissue - a factor in the survival of harp seal pups. Can. J. Physiol. Pharmacol. 54: 409-412.

GRAV, H.J., and A.S. BLIX. 1979. A source of non-shivering thermogenesis in fur seal skeletal muscle. Science (Wash. DC) 204: 87-89.

GRAV, H.J. , A.S. BLIX, and A. PASCHE. 1974. How do seal pups survive birth in Arctic winter? Acta Physiol. Scand. 92: 427-429.

GRAY, D.J.S., F.W. HOUGEN, L. NOVELLIE, H.H. SEPHTON, C.J.P. SPRUIT, V. TARICA, and O.B. VOLCKMAN. 1951a. Whale processing. I. The composition of products obtained from the concentration and spray-drying of glue water. J. Sci. Food Agric. 2: 450-454.

GRAY, D.J.S., L. NOVELLIE, H.H. SEPHTON, and R.G. SHUTTLEWORTH. 1951b. The composition of some whale liver extracts. J. Sci. Food Agric. 2: 454-456.

GRAY, R.W. 1927. The depth to which whales descend. Nature (Lond.) 120: 263.

GRAY, R.W. 1928. The blubber of whales. Nature (Lond.) 121: 791-792.

GRAYBILL, M., and J. HODDER. 1981. Haul out behavior and diet of harbor seals in Coos County, Oregon, p. 55. In Symposium: biology of marine mammals, Abstract. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

GREEN, J., and D.O. SINGLETON. 1954. Rapid chromatographic method for the determination of vitamin A in whale liver oils. Analyst (London) 79: 431-434.

GREENWOOD, A.G. 1979. Rearing program for orphaned monk seals (Monachus monachus). Work. Pap. 18: 157-162. In K. Ronald and R. Duguy (ed.) Symposium: the Mediterranean monk seal, Proceedings of the 1st international conference on the Mediterranean monk seal, Rhodes, Greece, 2-5 May, 1978. United Nations Environmental Program (U.N.E.P.) Tech. Ser. 1. Pergamon Press, New York, NY.

GREENWOOD, A.G., and C.E. BARLOW. 1979. Thyroid function in dolphins: radioimmunoassay measurement of thyroid hormones. Brit. Vet. J. 135: 96-102.

GREENWOOD, A.G., R.J. HARRISON, and H.W. WHITTING. 1974. Functional and pathological aspects of the skin of marine mammals, p. 73-110. In R.J. Harrison (ed.) Functional anatomy of marine mammals. Vol. 2. Academic Press, New York, NY.

GREENWOOD, A.G., S.H. RIDGWAY, and R.J. HARRISON. 1971. Blood values in young gray seals. J. Am. Vet. Med. Assoc. 159: 571-574.

GREENWOOD, A.G., and D. WILD. 1977. Fibreoptic gastroscopy in a grey seal, Halichoerus grypus. Aquat. Mamm. 5: 67-68.

GREGORY, M.E., S.K. KON, S.J. ROWLANDS, and S.Y. THOMPSON. 1955. The composition of the milk of the blue whales. J. Dairy Res. 22: 108-112.

GREKOVA, N.I. 1968. Effect of hydrocortisone and insulin on the hexokinase activity in the liver. Vopr. Med. Khim. 14: 203-205. (In Russian)

GRIDGEMAN, N.T., G.P. GIBSON, and J.P. SAVAGE. 1948. Chromatographic estimation of vitamin A in whale liver oil. Analyst (London) 73: 663-668.

GRIFFITHS, D., R.F. SEAMARK, and M.M. BRYDEN. 1979. Summer and winter cycles in plasma melatonin levels in the elephant seal (Mirounga leonina). Aust. J. Biol. Sci. 32: 581-586.

GRILLO, M.A., and A. SISINI. 1976. Urea cycle enzymes in the liver of a dolphin, Platanista indi. Ital. J. Biochem. 25: 219-228.

GRINER, L.A. 1971. Malignant leukemic lymphoma in two harbour seals (Phoca vitulina geronimensis). Am. J. Vet. Res. 32: 827-830.

GRINER, L.A. 1974. Some diseases of zoo animals. Adv. Vet. Sci. Comp. Med. 18: 251-271.

GRODSKY, G.M., and P.H. FORSHAM. 1966. Insulin and the pancreas. Annu. Rev. Physiol. 28: 347-380.

GRUBER,J.A. 1981. Ecology of the Atlantic bottlenose dolphin (Tursiops truncatus) in the Pass Cavallo area of Matagorda Bay, Texas. M.Sc. Thesis, Texas A & M University, College Station, TX. 182 p.

GRYNBERG, H., and H. SZCZEPANSKA. 1965. Chemical characteristics of fatty raw materials. I. Analysis of composition of fatty acids and alcohols from head sperm whale.

Tluszcze i Srodki Piorace 9: 202-206. (In Polish)

GUARD, C.L., and D.E. MURRISH. 1975. Effects of temperature on the viscous behaviour of blood for Antarctic birds and mammals. Comp. Biochem. Physiol. 52A: 287-290.

GUARINO, A.M., J.B. ANDERSON, D.K. STARKWEATHER, and C.F. CHIGNELL. 1975. Pharmacologic studies of camptothecin NSC-100880 distribution, plasma protein binding and biliary excretion. Cancer Chemother. Rep. Part I 57: 125-140.

GUDERLEY, H., and C. BOUCHARD. 1982. Isozymic differentiation of cardiac and muscle pyruvate kinase in the ringed seal, Phoca hispida. Physiol. Zool. 55: 190-198.

GUILER, E.R. 1978. Whale strandings in Tasmania since 1945, with notes on some reports. Pap. Proc. R. Soc. Tasmania 112: 189-213.

GULLIVER, G. 1845. On the size of the red corpuscles of the blood of Vertebrata with copious tables of measurements. Proc. Zool. Soc. Lond. 1845: 93.

GULLIVER, G. 1847. Measurements of the red corpuscles of the blood of Hippopotamus amphibius, Otaria jubata and Trichechus rosmarus. Proc. Zool. Soc. Lond. 1847: 579-580.

GULYAS, B.J., and J.C. DANIEL. 1967. Oxygen consumption in diapausing blastocysts. J. Cell. Comp. Physiol. 70: 33-36.

GULYAS, B.J., and J.C. DANIEL. 1969. Incorporation of labelled nucleic acid and protein precursors by diapausing and nondiapausing blastocytes. Biol. Reprod. 1: 11-20.

GUPTA, A.K.S. 1967. Occurrence of caprostanol in whale oil. Hoppe-Seyler's Z. Physiol. Chem. 348: 1688.

GURD, F.R.N., S.H. FRIEND, T.M. ROTHGEB, R.S. GURD, and H. SCOULOUDI. 1980. Electrostatic stabilization in sperm whale and harbor seal myoglobins: identification of groups primarily responsible for changes in anchoring of the A Helix. Biophys. J. 32: 65-75.

GUTMAN, M., E. NACHLIEL, and D. HUPPERT. 1982. Direct measurement of proton transfer as a probing for the microenvironment of the apomyoglobin heme binding site. Eur. J. Biochem. 125: 175-182.

GUTTMANN, A. 1955. Extracts and enzymic hydrolyzates from fish liver and mammalism liver. J. Fish. Res. Board Can. 12: 637-645.

GUY, O., D.C. BARTELT, J. AMIC, E. COLOMB, and C. FIGARELLA. 1976. Activation peptide of human trypsinogen 2. FEBS Lett. 62: 150-153.

HACHIYA, T., T. MIYAZAKI, K. SHIOMI, and S. KOSHITOMO. 1973. A study on pituitary and blood thyrotropin. Folia Endocrinol. Jpn. 49: 460.

HAGENBECK, C.H. 1962. Notes on walruses (Odobenus rosmarus) in captivity. Int. Zoo Yearb. 4: 24-32.

HAHN. 1884. De la presence de galets dans l'estomac des otaries (Otaria jubata). C.R. Seances Mem. Soc. Biol. Ser. 8; 1:4.

HAIGH, J.C., L.J. LEE, and R.E. SCHWEINBURG. 1983. Immobilization of polar bears with carfentanil. J. Wildl. Dis. 19: 140-144.

HAIGH, J.C., and R.E.A. STEWART. 1979. Narcotics in hooded seals (Cystophora cristata): a preliminary report. Can. J. Zool. 57: 946-949.

HAIN, J.H.W., G.R. CARTER, S.D. KRAUS, C.A. MAYO, and H.E. WINN. 1982. Feeding behaviour of the humpback whale, Megaptera novaeangliae, on the western north Atlantic. U.S. Natl Mar. Fish. Serv. Fish. Bull. 80: 259-268.

HALASZ, N.A., R. ELSNER, R.S. GARVIE, and G.T. GROTKE. 1974. Renal recovery from ischemia: a comparative study of harbour seal and dog kidneys. Am. J. Physiol. 227: 1331-1335.

HALE, H.M. 1962. The pigmy sperm whale (Kogia breviceps) on south Australian coasts III. Rec. S. Aust. Mus. (Adelaide) 14: 197-229.

HALL, E.R., and K.R. KELSON. 1959. The mammals of North America. Vol. 2. Ronald Press, New York, NY.

HALL, J.D. 1977. A non-lethal lavage device for sampling stomach contents of small marine mammals. U.S. Natl Mar. Fish. Serv. Fish. Bull. 75: 653-656.

HALL, J.D. 1981. Aspects of the natural history of cetaceans of Prince William Sound, Alaska. Ph.D. Thesis, University of California, Santa Cruz, CA. 148 p.

HALL, J.D., W.G. GILMARTIN, and J.L. MATTSSON. 1971. Investigation of a Pacific pilot whale stranding on San Clemente Island. J. Wildl. Dis. 7: 324-327.

HALLGREN, B., and S. LARSSON. 1963. Separation of pristane from herring. Acta Chem. Scand. 17: 543-545.

HALLORAN, D.W., and A.M. PEARSON. 1972. Blood chemistry of the brown bear (Ursus arctos) from southwestern Yukon Territory, Canada. Can. J. Zool. 50: 827-833.

HALNAN, E.T. 1942. Observations on the value of whale meat meal as a constituent of chick diets with a note on the influence of added protein on the efficiency of utilization of the gross energy of a ration. J. Agric. Sci. 32: 179-193.

HALSE, M. 1953. Spectrophotometric determination of the potency of vitamin A preparations showing abnormal ultraviolet absorption. Medd. Nor. Farm. Selsk. 15: 45-68.

HAMA, H., K. CHITANI, S. SAKAKI, and K. NARITA. 1964. The amino acid sequence in the fin whale insulin. J. Biochem. (Tokyo) 56: 285-293.

HAMANAKA, T., T. ITOO, and S. MISHIMA. 1982. Age related change and distribution of cadmuim and zinc concentrations in the Steller sea lion, Eumatopias jubata, from the coast of Hokkaido, Japan. Mar. Pollut. Bull. 13: 57-61.

HAMANAKA, T., H. KATO, and T. TSUJITA. 1977. Cadmium and zinc in the ribbon seal, Histriophoca fasciata, in the Okhotsk Sea. Hokkaido Univ. Res. Inst. North Pac. Fish. Spec. Vol. 52: 547-561.

HAMILTON, J.E. 1949. Weight, etc. of elephant seal. Nature (Lond.) 163: 536.

HAMILTON, R.J., M. LONG, and M.Y. RAIE. 1972. Sperm whale oil: III. Alkanes and alcohols. J. Am. Oil Chem. Soc. 49: 307-310.

HAMILTON, P.V., and R.T. NISHIMOTO. 1977. Dolphin predation on mullet. Fla Sci. 40: 251-252.

HAMLETT, G.W.D. 1935. Delayed implantation and discontinuous development in mammals. Q. Rev. Biol. 10: 432-437.

HAMMARSTEN, O. 1909. Untersuchen ueber die Gallen einiger Polartiere. 3. Mitteilungen ueber die Galle des Wallrosses. Hoppe-Seyler's Z. Physiol. Chem. 61: 454-494.

HAMMOND, D.D., D.M. DENISON, C.J. FARWELL, R.S. WYBURN, W.N. HANAFEE, and R.W.ELSNER. 1971. Thermal regulation in Weddell seal pups. Antarct. J. U. S. 6: 96-97.

HAMMOND, D.D., R. DOYLE, R.W. ELSNER, R.S. WYBURN, S.P. GRUENAU, and P. HILL. 1972. Temperature regulation and related studies on the Weddell seal, Leptonychotes weddelli. Antarct. J. U. S. 7: 182.

HAMMOND, D.D., and R.W. ELSNER. 1971. Transportation of Weddell seals from the Antarctica to temperate climates. J. Wildl. Dis. 7: 272.

HAMMOND, D.D., D. FOSTER, and R.W. ELSNER. 1970. Thermal regulation in newborn Weddell seals (Leptonychotes weddelli). Antarct. J. U. S. 5: 131.

HAMMOND, D.D., and F.H.A. MARSHALL. 1952. The life cycle, p. 739-846. In F.H.A. Marshall. Physiology of reproduction. Edited by A.S. Parkes. Longmans, Green, London.

HANCE, A.J., E.D. ROBIN, J.B. HALTER, N. LEWISTON, D.A. ROBIN, L. CORNELL, M. CALIGIURI, and J. THEODORE. 1982. Hormonal changes and enforced diving in the harbour seal, Phoca vitulina. II. Plasma catecholamines. Am. J. Physiol. 242: R528-R532.

HANCOCK, L. 1975. On raising a sea lion in your own home. Can. Geogr. J. 91(5): 42-48.

HANSEN, I.A., and C.C. CHEAH. 1969. Related dietary and tissue lipids of the sperm whale. Comp. Biochem. Physiol. 31: 757-761.

HANSEN, R.P. 1968. 4,8,12-Trimethyltridecanoic acid, its relation and identification from sheep perinephric fat. Biochim. Biophys. Acta 164: 550-557.

HANSEN, R.P., and S.M. MEIKLEN. 1970. Isoprenoid fatty acids in Antarctic krill (Euphausia superba). J. Sci. Food Agric. 21: 203-206.

HAPNER, K.D., R.A. BRADSAHW, C.R. HARTZELL, and F.R.N. GURD. 1968. Comparison of myoglobins from harbour seal, porpoise and sperm whale. J. Biol. Chem. 243: 683-689.

HAQUE, A.K.M.A., M. NISHIWAKI, T. KASUYA, and T. TOBAYAMA. 1977. Observations on the behaviour and other biological aspects of the Ganges susu, Platanista gangetica. Sci. Rep. Whales Res. Inst. Tokyo 29: 87-94.

HARINGTON, C.R. 1968. Denning habits of the polar bear, Ursus maritimus Phipps. Can. Wildl. Serv. Rep. Ser. 5: 30 p.

HARKNESS, D.R., and V. GRAYSON. 1969. Erythrocyte metabolism in the bottle-nosed dolphin, Tursiops truncatus. Comp. Biochem. Pnysiol. 28: 1289-1301.

HARMS, V., H.E. DRESCHER, and E. HUSCHENBETH. 1977/78. Further data on heavy metals and organochlorines in marine mammals from German coastal waters. Meeresforschung 26: 153-161.

HARRIS, C.I., and G. MILNE. 1981. The occurrence of the dipeptide balenine, beta-methyl-N-methylistidine, in the rabbit, sperm whale and chicken. Biochem. Soc. Trans. 9: 315P.

HARRIS, W.S., W.E. CONNOR, and M.P. McMURRAY. 1983. The comparative reduction of the plasma lipids and lipoproteins by dietary polyunsaturated fats, salmon oil vs. vegetable oils. Metab. Clin. Exp. 32: 179-184.

HARRISON, C.S., and J.D. HALL. 1978. Alaskan distribution of the beluga whale, Delphinapterus leucas. Can. Field-Nat. 92: 235-241.

HARRISON, R.J. 1963. A comparison of factors involved in delayed implantation in badgers and seals in Great Britain, p. 99-114. In A.C. Enders (ed.) Delayed implantation. University of Chicago Press, Chicago, IL.

HARRISON, R.J. 1964. Delayed implantation - a curious reproductive phenomena. Proc. R. Inst. G.B. 40: 143-158.

HARRISON, R.J. 1969a. Endocrine organs: hypophysis, thyroid and adrenal, p.349-390. In H.T. Anderson (ed.) The biology of marine mammals. Academic Press, New York, NY.

HARRISON, R.J. 1969b. Reproduction and reproductive organs, p. 253-348. In H.T. Anderson (ed.) The biology of marine mammals. Academic Press, New York, NY.

HARRISON, R.J. (ed.) 1972. Functional anatomy of marine mammals. Vol. 1. Academic Press, London. 451 p.

HARRISON, R.J. (ed.) 1974. Functional anatomy of marine mammals. Vol. 2. Academic Press, London. 366 p.

HARRISON, R.J., R.C. HUBBARD, R.S. PETERSON, C.E. RICE, and R.J. SCHUSTERMAN (ed.) 1968. The behaviour and physiology of pinnipeds. Appleton-Century-Crofts, New York, NY. 411 p.

HARRISON, R.J., and J. KING. 1965. Marine mammals. Hutchinson, London. 192 p.

HARRISON, R.J., and G.L. KOOYMAN. 1968. General physiology of the Pinnipedia, p. 211-295. In R.J. Harrison, R.C. Hubbard, R.S. Peterson, C.E. Rice and R.J. Schusterman (ed.) The behaviour and physiology of pinnipeds. Appleton-Century-Crofts, New York, NY.

HARRISON, R.J., L.H. MATTHEWS, and J.M. ROBERTS. 1952. Reproduction in some Pinnipedia. Trans. Zool. Soc. Lond. 27: 437-541.

HARRISON, R.J., I.W. ROWLANDS, H.W. WHITTING, and B.A. YOUNG. 1962. Growth and structure of the thyroid gland in the common seal (Phoca vitulina). J. Anat. 96: 3-16.

HARRISON, R.J., and J.D.W. TOMLINSON. 1956. Observations on the venous system in certain Pinnipedia and Cetacea. Proc. Zool. Soc. Lond. 126: 205-231.

HART, J.S. 1964. Insulative and metabolic adaptation to cold in vertebrates, p. 31-48. In Symposium: homeostasis and feedback mechanisms. Symp. Soc. Exp. Biol. 18.

HART, J.S., and H.D. FISHER. 1964. The question of adaptations to polar environments in marine mammals. Fed. Proc. 23: 1207-1214.

HART, J.S., and L. IRVING. 1959. The energetics of harbour seals in air and in water with special consideration of seasonal changes. Can. J. Zool. 37: 447-457.

HARTLES, R.L., and A.G. LEAVER. 1955. Identification of pyrimidines in the fluorescing fractions of the teeth of the sperm whale. J. Dent. Res. 34: 820-830.

HARTZELL, C.R., R.A. BRADSHAW, K.D. HAPNER, and F.R.N. GURD. 1968a. Comparison of myoglobins from harbour seal, porpoise and sperm whale. 2. Reactivity toward hydrogen ion and cupric ion. J. Biol. Chem. 243: 690-696.

HARTZELL, C.R., J.F. CLARK, and F.R.N. GURD. 1968b. Hemic dissociation in whale, seal and porpoise myoglobins and their alkylated derivatives. J. Biol. Chem. 234: 697-701.

HASHIMOTO, A., A. HIROTANI, and K. MUKAI. 1966. Studies on higher alcohols. V. Thin-layer chromatographic separation of monoenoic, dienoic and trienoic fatty alcohols. Yukagaku 15: 206-209.

HASHIMOTO, A., A. HIROTANI AND K. MUKAI. 1967. Thin-layer chromatography of true wax. Nippon Nogeikagaku Kaishi 41: 139-144.

HASHIMOTO, A., and J.J. LUDOWIEG. 1968. The protein polysaccharides from the nucleus pulposus of whale intervertebral disks. Effect of disulfide-reducing reagents. Biochemistry 7: 2469-2475.

HASHIMOTO, A., and K. MUKAI. 1963. Higher alcohols. II. Thin-layer chromatographic separation of alcohols and hydrocarbons. Yukagaku 12: 613-617.

HASHIMOTO, A., and K. MUKAI. 1969. Gas chromatography of straight-chain saturated wax esters. Shinku Kagaku 16: 95-100.

HASHIMOTO, K., M. MATSUMO, Z. YOSHIZAWA, and T. SHIBATA. 1963. A dextro-rotatory polysaccharide of very high anticoagulant activity newly isolated from whale's lungs and intestines. Tohoku J. Exp. Med. 81: 93- .

HASHIMOTO, K., Z. YOSIZAWA, and T. SHIBATA. 1967. Heparin from whale tissue. U.S. Patent 3, 342, 683 (Cl. 167-74), Sept. 19, 1967. Appl. Feb. 25, 1964; 3 p.

HASHIMOTO, S., and S. DAYTON. 1964. Lipids of coronary and aortic atheromata from a killer whale (Orcinus orca) (Abstract). Circulation 30(4 Suppl. 3): III-13.

HASHIMOTO, S., S. DAYTON, and J.C. ROBERTS. 1967a. Aliphatic wax alcohols and other lipids on atheromata and arterial tissues of cetaceans. Comp. Biochem. Physiol. 20: 975-986.

HASHIMOTO, T., and T. MAMURO. 1967. Unsaponifiable matter of sei whale blubber oil. Presence of pristane and squalene. Yukagaku 16: 657-661.

HASINOFF, B.B., and S.B. CHRISTI. 1982. Viscosity dependence of the kinetics of the diffusion controlled reaction of the carbon monoxide and myoglobin. Biochemistry 21: 4275-4278.

HASINOFF, B.B., and I. PECHT. 1983. Pulse radiolysis kinetics of the reaction of

hydrated electrons with ferric protoporphyrin IX, ferrous protoporphyrin IX, protoporphyrin IX and apomyoglobin. Biochim. Biophys. Acta 743: 310-315.

HASLEWOOD, G.A.D. 1961. Comparative studies of bile salts. 13. Bile acids of the leopard seal, Hydrurga leptonyx, and of two snakes of the genus Bitis. Biochem. J. 78: 352-359.

HASNAIN, A. 1978. Tryptic susceptibility of actomyosin from sei whale, Balaenoptera borealis. Indian J. Exp. Biol. 16: 962-964.

HATANO, M., K. ZAMA, H. SHIN, and H. IGARASHI. 1967a. Lipids from spinal cord of sperm whale. I. Fractionation of wax and glyceride from the sperm whale spinal cord. Hokkaido Daigaku Suisan Gakubu Kenkyu Iho 17: 207-214.

HATANO, M., K. ZAMA, H. WATANABE, and H. IGARASHI. 1967b. Lipids from spinal cord of sperm whale. II. Fatty acid and fatty alcohol composition of wax and glyceride from the sperm spinal cord. Bull. Fac. Fish. Hokkaido Univ. 17: 215-228.

HAUGEN, K. 1976. Effect of carbon dioxide and hydrogen ion concentration on smooth muscle tension in brain arteries from the sheep and the seal in vitro. Acta Physiol. Scand. Suppl. 440: 130.

HAY, A.W.N., and G. WATSON. 1976. The plasma transport proteins of 25-hydroxycholecalciferol in mammals. Comp. Biochem. Physiol. 53B: 163-166.

HAY, K., and R. McCLUNG. 1976. Observations on beluga and narwhal in the Canadian high Arctic summer 1974. Fish. Res. Board Can. Manuscr. Rep. Ser. 1385: 55 p.

HAY, K., and D.E. SERGEANT. 1976. Interim Technical Report, Arctic Whale Project, Environmental-Social Program, Northern Pipelines (Arctic Islands Pipeline). Fisheries Research Board of Canada. 41 p.

HAYASHI, T., T. OTSUKA, S. AIKAWA, and H. HOSHINO. 1966. A vasoactive polypeptide extracted from Callorhinus muscle and its clinical applications. Keio J. Med. 15: 227-243.

HAYASHI, T., and T. SUZUKI. 1967. A new biologically active peptide in fur seal muscle. Bull. Jpn. Soc. Sci. Fish. 33: 1044-1049.

HAYASHI, T., T. SUZUKI, S. NISHIWAKI, and T. OTSUKA. 1968. Vasodilating peptides. French Patent, 1,520,834 (Cl.C07g, A61k), 12 Apr. 1968, Appl. 14 Mar. 1967; 11 p.

HAYASHI, T., T. SUZUKI, S. NISHIWAKI, and T. OTSUKA. 1969. Peripheral vasodilator from animals of the family Otariidae. British Patent 1,163,471 (Cl. A61k) 04 Sept. 1969, Appl. 26, Jan. 1967; 10 p.

HAYASHIDA, T. 1969. Relatedness of pituitary growth hormone from various vertebrate classes. Nature (Lond.) 222: 294-295.

HAYASHIDA, T. 1970. Immunological studies with rat pituitary growth hormone (RGH). 2. Comparative immunochemical investigation of representatives of various vertebrate classes with monkey antiserum to RGH. Gen. Comp. Endocrinol. 15: 432-452.

HEATH, C.E. 1978. Serum protein analysis of gray seals. Mammal Rev. 8: 47-51.

HEATH, M.E., S.M. McGINNIS, and D. ALCORN. 1977. Comparative thermoregulation of suckling and weaned pups of the northern elephant seal, Mirounga angustirostris. Comp. Biochem. Physiol. 57A: 203-206.

HEBERT, D.M., D.W. LAY, and W.G. TURNBULL. 1980. Immobilization of coastal grizzly bear with etorphine hydrochloride. J. Wildl. Dis. 16: 339-342.

HEDGES,N.A., D.E. GASKIN, and G.J.D. SMITH. 1979. Rencular morphology and renal vascular system of the harbour porpoise, Phocoena phocoena. Can. J. Zool. 57: 868-875.

HEGGENHAUGEN, J. 1932. Whalemeat investigations with notes on the anatomy of the whale. Norsk Veterinaertidsskr. 44: 341-358.

HELLE, E., M. OLSSON, and S. JENSEN. 1976a. DDT and PCB levels and reproduction in ringed seal from the Bothnian Bay. Ambio 5: 188-189.

HELLE, E., M. OLSSEN, and S. JENSEN. 1976b. PCB levels correlated with pathological changes in seal uteri. Ambio 5: 261-263.

HELLE, E., M. OLSSON, and S. JENSEN. 1976c. Seals in the Baltic Sea and environmental poisons. Fauna Flora (Stockholm) 71: 41-48.

HELLE, E., H. HYVARINEN, H. PYYSALO, and K. WICKSTROM. 1983. Levels of organochlorine compounds in an inland seal, Phoca hispida saimensis, population in eastern Finland. Mar. Pollut. Bull. 14: 256-260.

HELLER, C.A. 1956. Tocopherol and vitamin A content of some marine blubber. Ph.D. Thesis, Cornell University, Ithaca, NY. (Diss. Abst. 16: 226-227, 1956)

HELMINEN, M., E. KARPPANEN, and K. HENRIKSSON. 1973. PCB (polychlorinated biphenyls) in the Finnish environment, p. 19-22. In PCB conference, (Collected Lectures), 2nd 1972. National Swedish Environmental Protection Board, Solna.

HELMINEN, M., E. KARPPANEN, and I. KOIVISTO. 1968. Mercury content of the ringed seal of Lake Saimaa. Suom. Elainlaakaril. 74: 87-89.

HEMMINGSEN, E.A. 1965. Accelerated transfer of oxygen through solutions of heme pigments. Acta Physiol. Scand. Suppl. 246: 54 p.

HEMPLEMAN, H.V., and A.P.M. LOCKWOOD. 1978. The physiology of diving in man and other animals. Arnold, London.

HENNINGS, H. 1950. The whale hypophysis with spectral reference to its ACTH content. A preliminary report. Acta Endocrinol. 5: 376-386.

HENRIKSSON, K., E. KARPPANEN, and M. HELMINEN. 1969. Kvicksilverhalter hos insjoe-och havssaelar. Nord. Hyg. Tidskr. 50: 54-59.

HENRY, J., and P.B. BEST. 1983. Organochlorine residues in whales landed at Durban, South Africa. Mar. Pollut. Bull. 14: 223-227.

HENRY, R.W., J.T. HALDIMAN, T.F. ALBERT, W.G. HENK, Y.Z. ABDEL BAKI, and D.W. DUFFIELD. 1983. Gross anatomy of the respiratory system of bowhead whale, Balaena mysticetus. Anat. Rec. 207: 435-450.

HENSEL, R.J., and F.E. SORENSEN. 1980. Age determination in live polar bears, p. 93-100. In C.F. Martinka and K.L. McArthur (ed.) Bears - their biology and management. U.S. Government Printing Office, Washington, DC.

HEPPLESTON, P.B. 1973. Organochlorines in British grey seals. Mar. Pollut. Bull. 4: 44-45.

HEPPLESTON, P.B., and M.C. FRENCH. 1972. Mercury and other metals in British seals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. 1972/N:5.

HEPPLESTON, P.B., and M.C. FRENCH. 1973a. Mercury and other metals in British seals. Nature (Lond.) 243: 302-303.

HERLANT, M. (ed.) 1971. Fonction gonadotrope et rapports hypothalmo-hypophysaires chez les animaux sauvages. Masson, Paris.

HERRERA, A.E., and H. LEHMANN. 1971. Primary structure of human myoglobin. Nature (Lond.) 232: 149-152.

HERWIG, R.P., J.T. STALEY, M. NERINI, and H.W. BRAHAM. 1983. Suggestion of fore stomach microbial fermentation in baleen whales. Abstr. Annu. Meet. Am. Soc. Microbiol. 83: N13.

HESSING, P. 1981. Gray whale spring migration into the Bering Sea, In M.L. Jones, S.L. Swartz and J.S. Leatherwood (ed.) The gray whale (Eschrichtius robustus). Academic Press, New York, NY.

HEU, R. 1977. Essai sur les phoques de l'hémisphère nord. Origine, evolution et biogéographie des espèces. Centre d'Etude Arctique, Ecologic Hautes Etudes Sciences Societé, Paris. 355 p.

HEU, R. 1978. L'evolution des pinnipèdes, boréales. Rev. Cent. Recherch. Inter-Nord. 3(11): 288-294.

HEWER, H.R. 1964. The biology of the grey seal: foetal growth rate, implantation and female cycle, p. 47-49. In E.A. Smith (ed.) A seals symposium. Proceedings of the National Conservation and Consultative Commission on grey seals fishery meeting 9th September 1964. University of Cambridge, National Conservatory, Edinburgh.

HEWER, H.R. 1964a. The determination of age, sexual maturity, longevity, and a life table in the grey seal (Halichoerus grypus). Proc. Zool. Soc. Lond. 142: 593-623.

HEWER, H.R., and K.M. BACKHOUSE. 1968. Embryology and foetal growth of the grey seal, Halichoerus grypus. J. Zool. (Lond.) 155: 507-533.

HEWITT, A.C.T. 1954. Feeding trials with whale solubles. J. Dep. Agric. Victoria 52: 23-30.

HEWITT, A.C.T. 1957. Meat meal vs. whale meal for pigs. J. Dep. Agric. Victoria 55: 156-157.

HEYLAND, J.D., and K. HAY. 1976. An attack by a polar bear on a juvenile beluga. Arctic 29: 56-57.

HIATT, E.P., and S.E. BRADLEY. 1941. The control of glomerular function of the seal (Phoca vitulina L.). Am. J. Physiol. 133: 327.

HIATT, E.P., and R.B. HIATT. 1942. The effect of food on the glomerular filtration rate and renal blood flow in the harbour seal (Phoca vitulina L.). J. Cell. Comp. Physiol. 19: 221-227.

HIDKA, H., and R. TATSUKAWA. 1981. Environmental pollution by chlorinated hydrocarbons in the Antarctic. Antarct. Rec. 71: 151-164. (In Japanese)

HIGASHI, H., T. KANEDA, and S. ISHII. 1950. Nutritive value of lipids. II. Nutritive value of finback whale oil and its hardened or polymerized oil. Bull. Jpn. Soc. Sci. Fish. 15: 745-749.

HIGASHI, H., T. KANEDA, Y. SHIMMA, and T. YAMAMOTO. 1951. Physiological effect of kitol and its heated products. Bull. Jpn. Soc. Sci. Fish. 17: 19-24.

HIGASHI, H., Y. SHIMMA, and H. TAGUCHI. 1960. Fatty acids in marine animal livers. I. Determination of the unsaturated fatty acids by bromide method. Bull. Jpn. Soc. Sci. Fish. 26: 411-419.

HILDITCH, T.P. 1956. The chemical constituents of natural fats. 3rd ed. Wiley, New York, NY.

HILDITCH, T.P., and J.A. LOVERN. 1929. The head and blubber oils of the sperm whale - III. Quantitative determinations of the higher fatty alcohols present. J. Soc. Chem. Ind. London 48: 365T-368T.

HILDITCH, T.P., and L. MADDISON. 1948. The component fatty acids and glycerides of whale oil. J. Soc. Chem. Ind. London 67: 653-657.

HILDITCH, T.P., and S.P. PATHAK. 1947. The use of low-temperature crystallization in the determination of component acids of liquid fats. 4. Marine animal oils. The component acids and glycerides of a grey (Atlantic) seal. J. Soc. Chem. Ind. London 66: 421-425.

HILDITCH, T.P., and S.P. PATHAK. 1949. Component acids of some seal blubber and liver fats. Biochem. J. 44: 218-224.

HILL, S.H. 1978. A guide to the effects of underwater shock waves on Arctic marine mammals and fish. Pacific Marine Science Report 78-26.

HINGA, K.R. 1979. The food requirements of whales in the southern hemisphere. Deep Sea Res. 26: 569-578.

HIPPE, E., F.S. JORGENSEN, and H. OLSSEN. 1977. Cobalamin-binding proteins in stomach and serum from various animal species data for B_{12} binding capacities and molecular sizes of the binding proteins. Comp. Biochem. Physiol. 56B: 305-309.

HIRAMATSU, Y., A. IZUMI, T. TEZUKA, and Y. KUROSAWA. 1970. Antagonizing substances obtained from whole heart extract to vasopressin induced myocardial hypoxia. Jpn. J. Pharmacol. 20: 313-324.

HIRAO, H., T. KINUMAKI, and K. SHIMIZU. 1950. Molecular distillation of fats and oils. Bull. Jpn. Soc. Sci. Fish. 15: 615-619.

HISSA, R. 1980. Arktisten lintujen ja nisaekkaeiden talvehtiminen (Responses to cold in Arctic homeotherms). Mem. Soc. Fauna Flora Fenn. 56: 41-50.

HJARDE, W. 1950. Spectrophotometric determination of vitamin A by means of chromatography. Acta Chem. Scand. 4: 628-640.

HOCHACHKA, P.W. 1973. Multiple-end products of anaerobiosis in diving vertebrates. Physiologist 16: 343.

HOCHACHKA, P.W. 1981. The diving mammal: a microcism in a "cool curving world", p. 255-266. In G. Pethes and V.L. Frenyo (ed.) Advances of physiological sciences, proceedings of the international congress, 28th 1980, 20. Akad. Kiado, Budapest. (Adv. Anim. Comp. Physiol.)

HOCHACHKA, P.W., G.C. LIGGINS, J. QUIST, R. SCHNEIDER, M.Y. SNIDER, T.R. WONDERS, and W.M. ZAPOL. 1977. Pulmonary metabolism during diving: conditioning blood for the brain. Science (Wash. DC) 198: 831-834.

HOCHACHKA, P.W., and B. MURPHY. 1979. Metabolic status during diving and recovery in marine mammals. Int. Rev. Physiol. 20: 253-288.

HOCHACHKA, P.W., B. MURPHY, G.C. LIGGINS, W.M. ZAPOL, R. CRENSY, M.Y. SNIDER, R. SCHNEIDER, and J. QVIST. 1979. Unusual maternal-fetal blood glucose concentration in Weddell seal. Nature (Lond.) 277: 388-389.

HOCHACHKA, P.W., T.G. OWEN, J.F. ALLEN, and G.C. WHITTOW. 1975. Multiple end-products of anaerobiosis in diving vertebrates. Comp. Biochem. Physiol. 50B: 17-22.

HOCHACHKA, P.W., and G.N. SOMERO. 1973. Strategies of biochemical adaptation. Saunders, Philadelphia, PA. 358 p.

HOCHACHKA, P.W., and K.B. STOREY. 1975. Metabolic consequences of diving in animals and man. Science (Wash. DC) 187: 613-621.

HOEKSTRA, A., and A.C.J. BURGERS. 1967. The melanophore-stimulating hormones in the hypophysis of the finback whale (Balaenoptera physalus). Acta Endocrinol. 56: 554-560.

HOEL, A. 1952. Newfoundlendernes, Kanadiernes, Groenlandernes og Russernes Selfangst. Bibliografi. Norsk. Polarinst. Medd. 69: 16-17.

HOFMAN, H. 1975. A selected bibliography of popular literature on marine mammals. U.S. Marine Mammal Commission, Washington, DC.

HOL, R., A.S. BLIX, and H.O. MYHRE. 1975. Selective redistribution of the blood volume in the diving seal. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 423-431.

HOLDEN, A.V. 1969. Organochlorine residues in seals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Fish. Improv. Comm. 1969/E: 22.

HOLDEN, A.V. 1971a. Organochlorine residues in seals in the North Sea. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. 1971/N:10.

HOLDEN, A.V. 1971b. Organochlorine residues in harp seal pups. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. 1971/N:9.

HOLDEN, A.V. 1972. Monitoring organochlorine contamination of the marine environment by the analysis of residues in seals, p. 266-272. In M. Ruivo (ed.) Marine pollution and sea life. Fishing news (Books) Ltd., Byfleet, Surrey.

HOLDEN, A.V. 1975. The accumulation of oceanic contaminants in marine mammals. Rapp. P.-

V. Reun. Cons. Int. Explor. Mer 169: 353-361.

HOLDEN, A.V. 1978. Organochlorine residues in blubber of grey seals (Halichoerus grypus) from the Farne Islands. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. Mar. Environ. Qual. Comm. 1978/E:41.

HOLDEN, A.V. 1978a. Pollutants and seals. Mammal Rev. 8: 53-66.

HOLDEN, A.V. 1981. Organochlorines: an overview. Mar. Pollut. Bull. 12: 110-115.

HOLDEN, A.V., and K. MARSDEN. 1967. Organochlorine pesticides in seals and porpoises. Nature (Lond.) 216: 1274-1276.

HOLMQUIST, R., T.H. JUKES, H. MOISE, M. GOODMAN, and G.W. MOORE. 1976. The evolution of the globin family genes: concordance of stochastic and augmented maximum parsimony genetic distances from alpha-hemoglobin beta-hemoglobin and myoglobin phylogenies. J. Mol. Biol. 105: 39-74.

HOLTZMAN, R.B. 1969. Concentrations of naturally occurring radionuclides, radium-226, lead-210 and polonium-210 in aquatic fauna, p. 535-546. In U.S. Atomic Energy Comm. 1967, CONF-670503. (Available from NTIS).

HOMESTEAD, A.V., B. BECK, and D.E. SERGEANT. 1971. A portable instantaneous branding device for permanent identification of wildlife, p. 1-12. In Symposium: Biological sonar and diving mammals. Proceedings of the 8th annual conference on biological sonar and diving mammals, October 22-23, 1971, Stanford Research Institute, Biological Sonar Laboratory, Menlo-Park, CA.

HONDA, K., R. TATSUKAWA, and T. FUJIYAMA. 1982. Distribution characteristics of heavy metals in the organs and tissues of striped dolphin, Stenella coeruleoalba. Agric. Biol. Chem. 46: 3011-3022.

HONDA, K., R. TATSUKAWA, K. ITANO, N. MIYAZAKI, and T. FUJIYAMA. 1983. Heavy metal concentrations in muscle, liver and kidney tissue of striped dolphin, Stenella coeruleoalba, and their variations with body length, weight, age and sex. Agric. Biol. Chem. 47: 1219-1228.

HONG, S.K., S. ASHWELL-ERICKSON, P. GIGLIOTTI, and R. ELSNER. 1982a. Effect of anoxia and low pH on organic ion transport and electrolyte distributions in harbour seal (Phoca vitulina) kidney slices. J. Comp. Physiol. 149: 19-24.

HONG, S.K., S. ASHWELL-ERICKSON, P. GIGLIOTTI, G. MUELLER, and R. ELSNER. 1981. Effect of nitrogen and low pH on organic ion transport and electrolyte distribution in the harbour seal, Phoca vitulina, kidney slice. Fed. Proc. 40: 475.

HONG, S.K., R. ELSNER, J.R. CLAYBAUGH, and K. RONALD. 1982b. Renal functions of the Baikal seal, Pusa sibirica, and ringed seal, Pusa hispida. Physiol. Zool. 55: 289-299.

HOPE, K.M., V.E. WESTON, and P. GARSTONE. 1954. Whale by-products for pig feeding. J. Agric. West. Aust. 3: 231-233.

HOPKINS, C.Y., and M.J. CHISHOLM. 1954. Eicosenoic acid on some natural glyceride oils. Can. J. Chem. 32: 1033-1038.

HOPPNER, K., J.M. McLAUGHLAN, B.G. SHAH, J.N. THOMPSON, J. BEARE-ROGERS, J. ELLESTAND-SAYED, and O. SCHAEFER. 1978. Nutrient levels of some foods of Eskimos from Arctic Bay, N.W.T., Canada. J. Am. Diet. Assoc. 73: 257.

HORI, H., M. IKEDA-SAITO, W. FRONCISZ, and T. YONETANI. 1983. Analysis of powder and single crystal EPR spectra of deoxymyoglobins containing cobalt II, protoporphyrin IX and mesoporphyrin IX at various microwave frequencies. J. Biol. Chem. 258: 12368-12372.

HORNER, R.A. 1977. History and recent advances in the study of the ice biota, p. 269-283. In M.J. Dunbar (ed.) Polar ocean. Arctic Institute of North America, Calgary, AB.

HORVATH, S.M., H. CHIODI, S.H. RIDGWAY, and S. AZAR. 1968. Respiratory and electrophoretic characteristics of hemoglobin of porpoise and sea lion. Comp. Biochem. Physiol. 24: 1027-1033.

HOTTA, H., H. MAKO, K. OKADA, and U. YAMADA. 1969. On the stomach contents of dolphins and porpoises off Kyushu. Bull. Seikai Reg. Fish. Res. Lab. 37: 71-85.

HOWELL, A.B. 1922. Habits of some west coast seals. J. Mammal. 3: 170-172.

HOWELL, A.B. 1930. Myology of the narwhal (Monodon monoceros). Am. J. Anat. 46: 187-215.

HOWELL, A.B., and M.H. LAWRENCE. 1930. Food of the gray and other whales. J. Mammal. 11: 321-322.

HØYGAARD, A. 1940. Studies on nutrition and physio-pathology of Eskimos. Skr. Nor. Vidensk. Akad. Oslo I. Mat.-Naturvidensk. Kl. 9.

HØYGAARD, A., and H.W. RASMUSSEN. 1939. Vitamin C sources in Eskimo food. Nature (Lond.) 43: 943.

HSU, L.H., and E.L. COE. 1971. Survival of historical structure and biochemical constituents in an ancient mummified Weddell seal. 3. Survival of biochemical constituents, p. 207-225. In W.H. Burt (ed.) Antarctic Pinnipedia. Antarct. Res. Ser. 18.

HUBBARD, R.C. 1965. Husbandry housing and care of seals and sea lions. Lab. Anim. Care 16.

HUBBARD, R.C. 1966. Notes on the housing, husbandry and care of seals and sea lions, p. 80-83. In C.E. Rice (ed.) Symposium: biological sonar and diving mammals, Proceedings of the 3rd annual conference on biological sonar and diving mammals, 23-24 May 1966. Stanford Research Institute, Biological Sonar Laboratory, Fremont, CA.

HUBBARD, R.C. 1968. Husbandry and laboratory care of pinnipeds, p. 299-358. In R.J. Harrison, R.C. Hubbard, R.S. Peterson, C.E. Rice and R.J. Schusterman (ed.) The behaviour and physiology of pinnipeds. Appleton-Century-Crofts, New York, NY.

HUBBARD, R.C. 1969a. The use of marine mammals in biomedical research. In Animal models for biomedical research, Proceedings of the symposium of the Institute of Laboratory Animal Resources, National Research Council, and American College of Laboratory Animal Medicine. Washington, DC.: National Academy of Sciences, Washington, DC.

HUBBARD, R.C. 1969b. Formation of a marine mammal study centre, p. 55-56. In Symposium: biological sonar and diving mammals, Proceedings of the 6th annual conference on biological sonar and diving mammals, October 17-18, 1969, Stanford Research Institute, Biological Sonar Laboratory, Menlo Park, CA.

HUBBARD, R.C. 1969c. Chemotherapy in captive marine mammals. Bull. Wildl. Dis. Assoc. 5: 218-230.

HUBBARD, R.C., and T.C. POULTER. 1968. Seals and sea lions as models for studies in comparative biology. Lab. Anim. Care 18: 238-297.

HUBER, H.R., D.G. AINLEY, and S.H. MORRELL. 1982. Sightings of cetaceans in the Gulf of Farallones, California, U.S.A., 1971-1979. Calif. Fish Game 68: 183-189.

HUI, C.A. 1979. Sea water consumption in the common dolphin, Delphinus delphis (Abstract). Am. Zool. 19: 995.

HUI, C.A. 1981. Sea water consumption and water flux in the common dolphin, Delphinus delphis. Physiol. Zool. 54: 430-440.

HULL, D. 1966. The structure and function of brown adipose tissue. Brit. Med. J. 22: 92-96.

HUNT, V. 1968. Measurement of radioactivity in pinniped eyes, p. 148. In R.V. Alpha Helix Bering Sea Exploration, project reports of the R.V. Alpha Helix Sea Expedition, February to October, 1968. Phase B. National Sciences Foundation, National Institute of Health, Washington, DC.

HUNTER, L., and S.H. MADIN. 1976. Clinical blood values of the northern fur seal, Callorhinus ursinus. J. Wildl. Dis. 12: 526-530.

HUNTER, L., and S.H. MADIN. 1978. Clinical blood values of the northern fur seal, Callorhinus ursinus. 2. Comparison of fresh vs stored frozen serum. J. Wildl. Dis. 14: 116-119.

HUNTER, L., and S.H. MADIN. 1978a. Clinical blood values of the northern fur seal, Callorhinus ursinus. III. Comparison of eye fluid and serum values. J. Wildl. Dis. 14: 176-177.

HUSSEIN, M.F., N.R.A. EL RAHMAN, M.S. EL DASHLOUTY, M.A.A. EL SALAM. 1982. Production of pancreatin from the pancreas of different animals. Ain Shams Univ. Fac. Agric. Res. Bull. 1924: 1-12.

HUSTAD, G.O., T. RICHARDSON, W.C. WINDER, and M.P. DEAN. 1971. Acoustic properties of some lipids. Chem. Phys. Lipids 7: 61-74.

HVOLBY, A. 1974. Expansion of solidifying fats. J. Am. Oil Chem. Soc. 51: 50-54.

HYLAND, J.L., E.D. SCHNEIDER, and E.R.L. NARRAGANSETT. 1977. Petroleum hydrocarbons and their effects on marine organisms, populations, communities, and ecosystems. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1977/E:64.

IABLOKOV, A.V. 1974. Population morphology and phenogeography as available methods for studying microevolution in nature. In Symposium: systemic and evolutionary biology, Proceedings of the 1st international congress on systematics and evolutionary biology, University of Colorado, Boulder, CO. Abstracts.

IATA. 1975. Live animals regulations. International Air Transport Association. Geneva. 103 p.

IDYLL, C.P. 1958. Ambergris - Neptune's treasure. Bull. Int. Oceanogr. Found. 4: 201-209.

IGARASHI, H., and H. KAKUBATA. 1952. Bile acids of northern marine animals. Mem. Fac. Agric. Hokkaido Univ. 1: 181-184.

IGARASHI, H., and K. ZAMA. 1955. The phosphatide of aquatic animals. II. The brain lecithins of the sperm whale. Nippon Nogeikagaku Kaishi 29: 958-961.

IGARASHI, H., K. ZAMA, and A. ISHIGAKI. 1953. Head blubber oil of a whale, Ziphius cavirostris. Bull. Jpn. Soc. Sci. Fish. 18: 493-496.

IGARASHI, H., K. ZAMA, and M. KATADA. 1956a. The phosphatide of aquatic animals. IV. The lecithin, cephalin, neutral fat and unsaponifiable matter of the heart of a rorqual (Balaenoptera borealis). Nippon Nogeikagaku Kaishi 30: 111-115.

IGARASHI, H., K. ZAMA, and M. KATADA. 1956b. The phosphatide of aquatic animals. V. Phosphatidic acid of the heart of a rorqual. Nippon Nogeikagaku Kaishi 30: 116-119.

IGUCHI, K. 1953. The industries utilizing sperm oil in Japan. J. Oil Chem. Soc. (Jpn) 2: 99-104.

IMAIZUMI, K., K. KAWABE, Z.I. YOSHIDA, K. IMAI, and I. TYUMA. 1982. Role of the heme side in the oxygenation of myoglobin and hemoglobin. J. Physiol. Soc. Jpn 44: 317.

IMAMURA, S. 1944. Fur seal oil and its vitamins. Nippon Nogeikagaku Kaishi 20: 190-192.

INDIAN AND NORTHERN AFFAIRS CANADA. 1981. Effects of crude oil on polar bears. Summary Report. Department of Indian and Northern Affairs, Ottawa.

INFANTE, A.J., M.Z. ATASSI, and C.G. FATHMAN. 1981. T-Cell clones reactive with sperm whale myoglobin. Isolation of clones with specificity for individual determinants on myoglobin. J. Exp. Med. 154: 1342-1356.

INGRAM, D.J.E., and J.C. KENDREW. 1956. Electron spin resonance in myoglobin and haemoglobin. Nature (Lond.) 178: 905-906.

INNES, S. 1981. Growth in northwest Atlantic harp seals, Phoca groenlandica. J. Zool. (Lond.) 194: 11-24.

INOUE, S., and M. MIYAWAKI. 1973. Variations in the hexuronic acid composition of mammalian heparins and mammalian heparin fractions. Biochim. Biophys. Acta 320: 73-78.

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (I.C.E.S.). 1974. List of publications on marine mammals. 1973. Int. Counc. Explor. Sea (I.C.E.S.). Counc. Meet. Mar. Mamm. Comm. 1974/N:2.

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (I.C.E.S.). 1978. List of publications on marine mammals, 1977. Int. Counc. Explor. Sea (I.C.E.S.). Counc. Meet. Mar. Mamm. Comm. 1978/N:2.

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (I.C.E.S.). 1979. List of publications on marine mammals, 1978. Int. Counc. Explor. Sea (I.C.E.S.). Counc. Meet. Mar. Mamm. Comm. 1979/N:4.

INTERNATIONAL FUND FOR ANIMAL WELFARE (IFAW). 1980. First aid for stranded marine mammals. International Fund for Animal Welfare, Yarmouth Port, MA. 24 p.

INTERNATIONAL NICKEL COMPANY INC. 1956. Fish and wildlife service uses monel tags in research to propagate seals for fur industry. INCO. May 26.

IRIE, M., T. YAMADA, and C. UKITA. 1966. Purification and properties of whale pancreatic ribonucleases. J. Biochem. (Tokyo) 59: 344-352.

IRVINE, A.B. 1970. Transportation of small cetaceans. Naval Undersea Research and Development Center Technical Paper.

IRVINE, A.B., and R.S. WELLS. 1972. Results of attempts to tag Atlantic bottlenosed dolphins (Tursiops truncatus). Cetology 13: 1-5.

IRVINE, A.B., R.S. WELLS, and M.D. SCOTT. 1982. An evaluation of techniques for tagging small Odontoceti cetaceans. U.S. Natl Mar. Fish. Serv. Fish. Bull. 80: 135-143.

IRVING, L. 1935a. Salt excretion in a marine mammal. Proc. Trans. R. Soc. Can. 24, Sect. 5.

IRVING, L. 1935b. The respiration of seals. Collect. Net 10: 125.

IRVING, L. 1938. Changes in the blood flow through the brain and muscles during the arrest of breathing. Am. J. Physiol. 122: 207-214.

IRVING. L. 1939. Respiration in diving mammals. Physiol. Rev. 19: 112-134.

IRVING, L. 1957. The usefulness of Scholander's views on adaptive insulation of animals. Evolution 11: 257-259.

IRVING, L. 1964a. Comparative anatomy and physiology of gas transport mechanisms. Sect. 3 Respiration, p. 177-212. In O.W. Fenn and H. Rahn (ed.) Handbook of physiology. Williams and Wilkins, Baltimore, MD.

IRVING, L. 1964b. Maintenance of warmth in Arctic mammals. Symp. Zool. Soc. Lond. 13: 1-14.

IRVING, L. 1967. Aquatic and diving mammals. In G.C. Whittow (ed.) Comparative physiology of thermoregulation. Academic Press, London.

IRVING, L. 1968. Adaptations to cold. Sci. Am. 222-227, 353.

IRVING, L. 1969. Temperature regulation in marine mammals, p. 147-174. In H.T. Anderson (ed.) The bioloy of marine mammals. Academic Press, New York, NY.

IRVING, L. 1970. Morpho-physiological adaptations in marine mammals for life in polar areas, p. 455-463. In M.W. Holdgate (ed.) Antarctic ecology. Vol. 1. Academic Press, London.

IRVING, L. 1972. Arctic life of birds and mammals including man. Springer-Verlag, New York, NY.

IRVING, I. 1973. Aquatic mammals, p. 47-96. In G.W. Whittow (ed.) Comparative physiology of thermoregulation. Vol. 3. Academic Press, New York, NY.

IRVING, L., and K.C. FISHER. 1935. The problem of water supply in a marine mammal, the seal. Can. Chem. Metall. 19: 66.

IRVING, L., K.C. FISHER, and F.C. McINTOSH. 1935a. The water balance of a marine mammal, the seal. J. Cell. Comp. Physiol. 6: 387-391.

IRVING, L., and J.S. HART. 1957. The metabolism and insulation of seals as bare-skinned mammals in cold weather. Can. J. Zool. 35: 497-511.

IRVING, L., and J. KROG. 1954. Body temperature of Arctic and subarctic birds and mammals. J. Appl. Physiol. 6: 667-680.

IRVING, L., and J. KROG. 1955. Temperature of skin in the Arctic as a regulator of heat. J. Appl. Physiol. 7: 355-364.

IRVING, L., and J. KROG. 1957. Skin temperature and the conservation of heat. Proc. Alaska Sci. Conf. 5:

IRVING, L., J. KROG, and M. MONSON. 1935b. The metabolism of some Alaskan animals in winter and summer. Physiol. Zool. 8: 173-185.

IRVING, L., L.J. PEYTON, C.H. BAHN, and R.S. PETERSON. 1962. Regulation of temperature in fur seals. Physiol. Zool. 35: 275-284.

IRVING, L., K. SCHMIDT-NIELSEN, and N.S.B. ABRAHAMSEN. 1957. On the melting points of animal fats on cold climates. Physiol. Zool. 30: 93-105.

IRVING, L., P.F. SCHOLANDER, and S.W. GRINNELL. 1940. Experimental studies on the physiology of diving mammals. Science (Wash. DC) 92: 483.

IRVING, L., P.F. SCHOLANDER, and S.W. GRINNELL. 1941. Respiration of porpoise, Tursiops truncatus. J. Cell. Comp. Physiol. 7: 145-168.

IRVING, L., O.M. SOLANDT, D.Y. SOLANDT, and K.C. FISHER. 1935c. The respiratory metabolism of the seal. Proc. Trans. R. Soc. Can. 24, Sect. 5.

IRVING, L., O.M. SOLANDT, D.Y. SOLANDT, and K.C. FISHER. 1935d. Respiratory characteristics of the blood of the seal. J. Cell. Comp. Physiol. 6: 393-340.

IRVING, L., O.M. SOLANDT, D.Y. SOLANDT, and K.C. FISHER. 1935e. The respiratory metabolism of the seal and its adjustment to diving. J. Cell. Comp. Physiol. 7: 137-151.

ISHIHARA, Y. 1960. Crystalline whale pepsin. Mem. Fac. Fish. Hokkaido Univ. 8(1): 31 p.

ISHIHARA, Y. 1961. Whale lipase. I. Lipase of pancreas of Balaenoptera acutorostrata. Bull. Fac. Fish. Hokkaido Univ. 11: 23-28.

ISHIHARA, Y., T. SAITO, Y. ITO, and M. FUJINO. 1958. Structure of sperm and sei whale insulins and their breakdown by whale pepsin. Nature (Lond.) 181: 1468-1469.

ISHIKAWA, Y. 1949. On the proteolytic enzyme activity of sperm whale pancreas. II. Bull. Jpn. Soc. Sci. Fish. 15: 337-342.

ISHIKAWA, Y. 1958. Absorption of gases by whale oils. II. Absorption of nitrogen by whale oils. Sci. Rep. Whales Res. Inst. Tokyo 13: 309-321.

ISHIKAWA, Y. 1959. A characteristic property of whale oils concerning the absorption of gases. III. On the absorption of oxygen by whale oils. J. Fac. Fish. Anim. Husb. Hiroshima Univ. 2: 335-347.

ITABASHI, Y., and T. TAKAGI. 1980. Gas chromatographic separations of diacylglycerols and monoacylglycerols based on the degree of unsaturation and positional placement of acyl groups. Lipids 15: 205-215.

ITO, S., and K. FUKUZUMI. 1962. Quantitative analysis of fatty acid esters of marine animal oils by gas-liquid chromatography. Kogyo Kagaku Kaishi 65: 1963-1968.

ITO, Y., E. TAKAHATA, and H. UI. 1952. Fish pituitary. II. Adrenocorticotropic activity of fish pituitary gland. Yakugaku Zasshi 72: 1029-1033.

ITOH, S., and H. TSUYUKI. 1974a. Fatty acid composition of different blubber oils of the finless porpoise. Sci. Rep. Whales Res. Inst. Tokyo 26: 303-306.

IVERSEN, J.A., and J. KROG. 1973. Heat production and body surface area on seals and sea otter. Norw. J. Zool. 21: 51-54.

IWASA, Y., and I. MUKAI. 1950. Pigment in whale oil. I. The adhesion of the pigment. Bull. Jpn. Soc. Sci. Fish. 16: 111-114.

JACKSON, R.W., T.S. DRING, and C.R. SCHROEDER. 1939. The urinary nitrogen distribution of representative members of Carnivora. Zoologica (N.Y.) 24: 345-354.

JAKOBSEN, N.O. 1979. Produksjon, alder ved forste gangs kasting og naturlig dodelighet hos klappmyss Cystophora cristata (Erxleben 1777). Thesis. Vesterisen Institutt for Fiskeribiologi, Universitet i Bergen, Norway. 78 p.

JAMESON, R.J. 1975. Observations of captive sea otters, p. 41. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

JAMIESON, G.R., and E.H. REID. 1967. Analysis of oils and fats by gas chromatography. III. Separation factors of acetates, alco-

hols and hydrocarbons. J. Chromatogr. 26: 8-16.

JANGAARD, P.M., R.G. ACKMAN, and R.D. BURGHER. 1963a. Component fatty acids of the blubber fat from the common or harbour seal, Phoca vitulina concolor. Can. J. Biochem. Physiol. 41: 2543-2546.

JANGAARD, P.M., R.G. ACKMAN, and J.C. SIPOS. 1967. Seasonal changes in fatty acid composition of cod liver, flesh, roe and milk lipids. J. Fish. Res. Board Can. 24: 613-627.

JANGAARD, P.M., R.D. BURGHER, and R.G. ACKMAN. 1963b. A preliminary investigation of the blubber oil from the Atlantic bottle-nose whale. J. Fish. Res. Board Can. 20: 245-247.

JANGAARD, P.M., and P.J. KE. 1968. Principal fatty acids of depot fat and milk lipids from harp seal (Pagophilus groenlandica) and hooded seal (Cystophora cristata). J. Fish. Res. Board Can. 25: 2419-2426.

JANSKY, I. 1971. Participation of body organs during nonshivering heat production, p. 159-170. In L. Jansky (ed.) Nonshivering thermogenesis. Academia, Prague.

JANSSON, B., S. JENSEN, M. OLSSON, L. RENBERG, G. SUNDSTROM, and R. VAZ. 1975. Identification of GC-MS (gas chromatography-mass spectrometry) of phenolic metabolites of PCB (polychlorinated biphenyls) and p,p'-DDE isolated from Baltic guillemot and seal. Ambio 4: 93-97.

JANSSON, B., R. VAZ, G. BLOMKVIST, S. JENSEN, and M. OLSSON. 1979. Chlorinated terpenes and chlordane components found in fish, guillemot and seal from Swedish waters. Chemosphere 8: 181-190.

JARRELL, S.D. 1981. The "aerobic-anaerobic" theory of LDH isozyme function and its application to the diving situation, p. 64. In Symposium: biology of marine mammals, Abstracts. 4th Biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA, University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

JENKINSON, D.M. 1973. Comparative physiology of sweating. Br. J. Dermatol. 88: 397-406.

JENNESS, R. 1974. The composition of milk, p. 3-96. In B.L. Larson and V.R.Smith (ed.) Lactation: a comprehensive treatise. Vol. 3. Academic Press, New York, NY.

JENNESS, R., A.W. ERICKSON, and J.J. CRAIGHEAD. 1972. Some comparative aspects of milk from four species of bears. J. Mammal. 53: 34.

JENNESS, R., and D.K. ODELL. 1978. Composition of milk of the pygmy sperm whale (Kogia breviceps). Comp. Biochem. Physiol. 61A: 383-386.

JENNESS, R., and R.E. SLOAN. 1970. The composition of milks of various species: a review. Dairy Sci. Abstr. 32: 599-612.

JENNESS, R., T.D.W. WILLIAMS, and R.J. MULLIN. 1981. Composition of milk of the sea otter (Enhydra lutris). Comp. Biochem. Physiol. 70A: 375-379.

JENNINGS, R.A. 1966. Elephant seal tagging program. J. Mammal. 47: 379.

JENSEN, A.A., and K.F. JORGENSEN. 1983. Polychlorinated terphenyls use, levels and biological effects. Sci. Total Environ. 27: 231-250.

JENSEN, H., E.M.K. GEILING, and S. TOLKSDORF. 1939. Gonadotropic activity of anterior pituitary of the finback whale. Proc. Soc. Exp. Biol. Med. 42: 470-472.

JENSEN, S., and B. JANSSON. 1976. Identification of new DDT and PCB metabolites of seals from the Baltic Sea. Nordforsk, Miljoevardssekr.,(2, Org. Miljoegifer Vatten, Nord. Symp: Vattenforsk., 12th), 491-494.

JENSEN, S., and B. JANSSON. 1976a. Anthropogenic substances in seal from the Baltic: methyl sulfone metabolites of PCB and DDE. Ambio 5: 257-260.

JENSEN, S., B. JANSSON, and M. OLSSON. 1979. Number and identity of anthropogenic substances known to be present in Baltic seals and their possible effects on reproduction. Ann. N.Y. Acad. Sci. 320: 436-448.

JENSEN, S., A.G. JOHNELS, M. OLSSON, and G. OTTERLIND. 1969. DDT and PCB in marine animals from Swedish waters. Nature (Lond.) 224: 247-250.

JESSEE, W.F. 1968. Atherosclerosis in pinnipeds, p. 78-80. In R.V. Alpha Helix Bering Sea Expedition. Project Reports of the R.V. Alpha Helix Bering Sea Expedition. February to October, 1968, Phase A. National Sciences Foundation, National Institute of Health, Washington, DC.

JEWELL, P.A., and E.A. SMITH. 1965. Immobilization of grey seals. J. Wildl. Manage. 29: 316-318.

JOHANSEN, B.G. 1934. On nutrition of the Caspian seal. Zool. Zh. 11: 584-587. (In Russian)

JOHANSEN, K. 1969. Adaptive responses to cold in arterial smooth muscle from heterothermic tissues of marine mammals. Nature (Lond.) 223: 866-867.

JOHANSEN, P., F.O. KAPEL, and I. KRAUL. 1980. Heavy metals and organochlorines in marine mammals from Greenland. Int. Counc.

Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1980/E:32.

JOHN, T.M., B.A. McKEOWN, J.C. GEORGE, and K. RONALD. 1980. Plasma levels of growth hormones and free fatty acids in the harp seal. Comp. Biochem. Physiol. 66B: 159-162.

JOHNSEN, D.O., J.D. PULLIAM, P.C. SMITH, P. TANTICHAROENYOS, and V. CHAICUMPA. 1969. Nutritional and health requirements for development and maintenance of conventional animal colonies. Annu. Prog. Rep. SEATO Med. Res. Lab. 212-227.

JOHNSON, A.L. 1959. Seal marking. Nature (Wales) 5: 716-724.

JOHNSON, J.D. 1975. Comparative aspects of lactose digestion and synthesis in mammals. California sea lion. Mod. Probl. Paediatr. 15: 194-200.

JOHNSON, J.D., R.O. CHRISTIANSEN, and N. KRETCHMER. 1972. Lactose synthetase in mammary gland of the California sea lion. Biochem. Biophys. Res. Commun. 47: 393-397.

JOHNSON, M.L., C.H. FISCUS, B.T. OSTENSON, and M.L. BARBOUR. 1966. Marine mammals, p. 877-924. In N.J. Wilimovsky (ed.) Environment of the Cape Thompson Region, Alaska. U.S. Atomic Energy Commission, Washington, DC.

JOHNSON, R.H. 1982. Food sharing behavior in captive Amazon River dolphins, Inia geoffrensis. Cetology 43: 1-3.

JOHNSON, S.R. 1979. Fall observations of westward migrating white whales (Delphinapterus leucas) along the central Alaskan Beaufort Sea coast. Arctic 32: 275-276.

JONES, A.M., Y. JONES, and W.D. STEWART. 1972. Mercury in marine organisms of the Tay region. Nature (Lond.) 238: 164-165.

JONES, D., K. RONALD, D.M. LAVIGNE, R. FRANK, M. HOLDRINET, and J.F. UTHE. 1975. Biocide residues in the harp seal (Pagophilus groenlandicus). Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1975/N:11.

JONES, D., K. RONALD, D.M. LAVIGNE, R. FRANK, M. HOLDRINET, and J.F. UTHE. 1976. Organochlorine and mercury residues in the harp seal (Pagophilus groenlandicus). Sci. Total Environ. 5: 181-195.

JONES, R.F. 1981. Food habits of smaller marine mammals from northern California, U.S.A. Proc. Calif. Acad. Sci. 42: 409-433.

JONKEL, C. 1969. Polar bear research in Canada. Can. Wildl. Serv. Prog. Notes 13: 8 p.

JONKEL, C.J. 1969a. White whales wintering in James Bay. J. Fish Res. Board Can. 26: 2205-2207.

JONSGARD, A. 1966. Biology of the north Atlantic finwhale, Balaenoptera physalus (L). Hvalradets Skr. 6: 62 p.

JONSGARD, A., and K. DARLING. 1977. On the biology of the eastern Atlantic sei whale, Balaenoptera borealis. Int. Whaling Comm. Rep. Comm. (1): 124-129.

JORDAN, D.S., and G.A. CLARK. 1899. Practical experiment in the branding and herding of the seals, p. 325-331. In D.S. Jordan (ed.) Special papers relating to the fur seal and to the natural history of the Pribilof Islands. (D.S. Jordan (ed.) The fur seals and fur seal islands of the north Pacific Ocean. Part 3.) U.S. Treasury Department, Document 2017, U.S. Government Printing Office, Washington, DC.

JORDAN, D.S., and G.A. CLARK. 1912. The fur seals and their enemies. Rev. Worlds Work 45: 315-317.

JUDGE, J. 1899. Branding on St. George, p. 338. In D.S. Jordan (ed.) Special papers relating to the fur seal and to the natural history of the Pribilof Islands. (D.S. Jordan (ed.) The fur seals and fur seal islands of the north Pacific Ocean. Part 3.) U.S. Treasury Department, Document 2017, U.S. Government Printing Office, Washington, DC.

JUE, T., R. KRISHNAMOORTHI, and G.M. LA MAR. 1983. Protein NMR study of the mechanism of the heme apoprotein reaction for myoglobin. J. Am. Chem. Soc. 105: 5701-5703.

JUNQUERIRA, L.C.U., G. HOXTER, and D. ZAGO. 1968. Observations on the biochemistry of fresh water rays and dolphin blood serum. Rev. Bras. Pesqui. Med. Biol. 1: 225-226.

JUNQUERIRA, L.C.U., A.M.S. TOLEDO, and A.I. DOINE. 1973. Digestive enzymes in the parotid and submandibular glands of mammals. An. Acad. Bras. Cienc. 45: 629-643.

JURASZ, C.M. 1975. Bubble net feeding of the humpback, p. 44. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

JURASZ, C.M., and V.P. JURASZ. 1979. Feeding modes of the humpback whale, Megaptera novaeangliae, in southeastern Alaska, U.S.A. Sci. Rep. Whales Res. Inst. Tokyo 31: 69-84.

JUUL, P. 1967. Stability of plasma enzymes during storage. Clin. Chem. 13: 416-422.

KABAIVANSKI, Y.A. 1955. Correct rise of the fat, meat and skin of the dolphin. Rybn. Khoz. 1955(10): 50-54. (In Russian)

KABAYASHI, Y., H. KABENO, M. YAMAMOTO, and Y. HIRAOKA. 1970. Extraction of gastrin from gastric mucous membrane of the whale. Japan Patent 70 10 516 (Cl. 30A

211), 15 Apr. 1970, 15 Apr. 1970, Appl. 26 Oct. 1967; 3 p.

KABENO, H., T. HONDA,Y. KABAYASHI, and T. MURATA. 1971. Gastrointestinal hormones. V. Distribution of gastric secretory inhibiting substances in whale gastrointestinal mucosa. Chem. Pharm. Bull. 19: 1487-1490.

KABENO, H., T. HONDA, S. KONDO, K. TACHIBANA, Y. KOBAYASHI, and T. MURATA. 1970. Gastrointestinal hormones. 4. Insulation and physiological effect of glycoprotein in whale gastric mucosa. Yakugaku Zasshi 90: 576-580.

KABENO, H., M. YAMAMOTO, K. TACHIBANA, Y. KOBAYASHI, and T. MURATA. 1969. Studies on the gastrointestinal hormones: I. Isolation of gastrin and gastrone-like substance from whale stomach. Yakugaku Zasshi 89: 1002-1006.

KADANE, J., and R. PENNER. 1983. Range ambiguity and pulse interval jitter in the bottlenosed dolphin, Tursiops truncatus. J. Acoust. Soc. Am. 74: 1059-1061.

KADUCE, T.L., A.A. SPECTOR, and G.E. FOLK, Jr. 1981. Characterization of the plasma lipids and lipoproteins of the polar bear. Comp. Biochem. Physiol. 69B: 541-546.

KAEGI, J.H.R., Y. KOJIMA, M.M. KISSLING, and K. LERCH. 1980. Metallothionein: an exceptional metal thiolate protein, p. 223-238. In K. Elliott and J. Whelan (ed.) Symposium: sulphur in biology, Proceedings and Meeting, London, England, April 24-26, 1979. Elsevier/North Holland. (CIBA Found. Symp. Vol. 72)

KAJIMURA, H., C.H. FISCUS, and R.K. STROUD. 1981. Food of the Pacific white sided dolphin, Lagenorhynchus obliquidens, Dall's porpoise, Phocoenoides dalli and northern fur seal, Callorhinus ursinus, off California and Washington; with appendices on size and food of Dall's porpoise from Alaskan waters. U.S. Natl Mar. Fish. Serv. Tech. Mem. F/NWC-2: 30 p.

KAKINUMA, K., H. NAITO, T. TSUIHIJI, M. MATSUMOTO, T. TOMONO, H. ONOE, S. ABE, Y. ENDO, S. KANNO, A. TAKAGI, and K. NAKAGAWA. 1950-51. Nutritional studies of edible fats and oils. J. Jpn. Soc. Food Nutr. 3: 156-172.

KALENAS, K. 1952. Ascorbic acid levels on the plasma of Antarctic birds and mammals. Nature (Lond.) 169: 836.

KAMENETSKII, F.A. 1929. Blubber of Phoca sibirica Gmel. Dokl. Akad. Nauk SSSR 1929: 67-72.

KANAZU, R., H. MORII, and T. FUKUHARA. 1969a. Studies on the little toothed whales in the west sea area of Kyushu - XVII. About higher branched chain fatty acids in head oil of the little toothed whale - I. Bull. Fac. Fish. Nagasaki Univ. 28: 161-165.

KANAZU, R., H. MORII, and T. FUKUHARA. 1969b. Higher branched-chain fatty acids in head oil of little toothed whale. 2. Bull. Fac. Fish. Nagasaki Univ. 28: 167-171.

KANDINSKII, P.A. 1970. On blood groups in Antarctic seals. Izv. Tikhookean.Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 70: 252-255. (In Russian)

KANDINSKII, P.A. 1973. Dimensional characteristics of blood erythrocytes of Antarctic pinnipeds. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. Issled. Biol. Promysl. Okeanogr. 4: 178-181. (In Russian)

KANDINSKII, P.A. 1974. Viscosity, specific weight and hematocrit of blood in Antarctic pinnipeds. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz.Okeanogr. 87: 216-218. (Fish. Res. Board Can. Transl. Ser. 3278, 1974)

KANWISHER, J., and G. SUNDNES. 1966a. Thermal regulation in cetaceans, p. 397-409. In K.S. Norris (ed.) Whales, dolphins and porpoises. University of California Press, Berkeley, CA.

KANWISHER, J., and G. SUNDNES. 1966b. Physiology of a small cetacean. Hvaldradeks Skr. 48: 45-63.

KAPEL, F.O. 1972. Age analysis of hooded seals in south Greenland. Int. Comm. Northwest Atl. Fish Res. Doc. 85, Serial No. 2818.

KAPEL, F.O. 1974. New data on hunting of hooded seals and age composition of catches in south Greenland. Int. Comm. Northwest Atl. Fish. Res. Doc. 85, Serial No. 3321.

KAPEL, F.O. 1975. Recent research on seals and seal hunting in Greenland. Rapp. P.-V. Cons. Int. Explor. Mer 169: 462-478.

KAPEL, F.O. 1977. Catch of belugas, narwhals and harbour porpoises in Greenland, 1954-75 by year, month and region. Int. Whaling Comm. Rep. Comm. 27: 507-520.

KARADZOVA, P.T., B. NEDKOV, P. ATANASOV, and B. KEIL. 1964. Proteins. LXXXVI. Isolation and properties of myoglobin from the dolphin (Delphinus delphis) collection. Czech. Chem. Commun. 29: 551-556.

KARL, R., C. LITCHFIELD, D.K CALDWELL, and M.C. CALDWELL. 1978. Compositional topography of melon and spermaceti organ lipids in the pygmy sperm whale, Kogia breviceps: implications for echolocation. Mar. Biol. (Berl.) 47: 115-123.

KARL, T., and P. KAURANEN. 1978. Mercury and selenium contents of seals from fresh and brackish waters in Finland. Bull. Environ. Contam. Toxicol. 19: 273-280.

KARNOVSKY, M.L., and W.S. RAPSON. 1947. South African fish products. 26. Application of the Fitelson method of "squalene" determination to some marine oils. J. Soc. Chem. Ind. London 66: 124-125.

KASAI, N. 1982. Isolation and characterization of antigenic fragments of whale proteoglycan core proteins. Shika Kiso Iggakkai Zasshi 24: 14-23.

KATO, H. 1982. Food habits of largha seal, Phoca largha, pups in the pack ice area. Sci. Rep. Whales Res. Inst. Tokyo. 34: 123-136.

KATO, T., and T. SHIMADA. 1970. Isolation and properties of ferritin from dolphin (Delphinus cetacea) spleen. J. Biochem. (Tokyo) 68: 681-687.

KAUFMANN, H.P., and Z.E. SHOEB. 1961. The paper chromatography of fats. XLVI. The composition of sperm whale oil. The isolation and characterization of palmitoleic acid. Fette Seifen Anstrichm. 63: 609-614.

KAWAKAMI, T. 1976. Squids found in the stomach of sperm whales in the northwestern Pacific. Sci. Rep. Whales Res. Inst. Tokyo 28: 145-152.

KAWAKAMI, T. 1980. A review of sperm whale, Physeter macrocephalus, food. Sci. Rep. Whales Res. Inst. Tokyo 32: 199-218.

KAWAMURA, A. 1970. Food of sei whale, Balaenoptera borealis, taken by Japanese whaling expeditions in the Antarctic season, 1967-1968. Sci. Rep. Whales Res. Inst. Tokyo 22: 127-152.

KAWAMURA, A. 1971. Influence of chasing time to stomach content contents of baleen and sperm whales. Sci. Rep. Whales Res. Inst. Tokyo 23: 27-36.

KAWAMURA, A. 1974. Food and feeding ecology in the southern sei whale. Sci. Rep. Whales Res. Inst. Tokyo 26: 25-144.

KAWAMURA, A. 1975. A consideration of an available source of energy and its cost for locomotion in fin whales with special reference to the seasonal migration. Sci. Rep. Whales Res. Inst. Tokyo 27: 61-79.

KAWAMURA, A. 1977. On the food of Brydes whales caught in the South Pacific and Indian Oceans. Sci. Rep. Whales Res. Inst. Tokyo 29: 49-58.

KAWAMURA, A. 1980a. Food habits of the Brydes whales, Balaenoptera brydei, taken in the Pacific Ocean and Indian Ocean. Sci. Rep. Whales Res. Inst. Tokyo 32: 1-24.

KAWAMURA, A. 1980b. A review of food of balaenopterid whales. Sci. Rep. Whales Res. Inst. Tokyo 32: 155-198.

KAWAMURA, A. 1982. Food habits and prey distributions of three rorqual species in the North Pacific Ocean. Sci. Rep. Whales Res. Inst. Tokyo 34: 59-92.

KAWAMURA, A., and S. HAMAOKA. 1981. Feeding habits of the gonostomatid fish, Vinciguerria nembaria, collected from the stomach of Brydes whales in the southwestern north Pacific. Bull. Plankton Soc. Jpn 28: 141-152.

KAWAMURA, S., J. MAEDA, and Y. SUYAMA. 1976. Sei whale oxidized baleen. I. Amino acid composition and α-, β- and γ-keratose. Bull. Fac. Agric. Meiji Univ. 36: 33-40.

KAWAUCHI, H., D. CHUNG, and C.H. LI. 1980. Isolation and characterization of β-lipotropin from fin whale pituitary glands. Int. J. Pept. Protein Res. 15: 171-176.

KAWAUCHI, H., K. MURAMOTO, and J. RAMACHANDRAN. 1978. Isolation and primary structure of adrenocorticotropin from several species of whale. Int. J. Pept. Protein Res. 12: 318-324.

KAWAUCHI, H., and M. TUBOKAWA. 1979. Isolation and characterization of fin whale prolactin. Int. J. Pept. Protein Res. 13: 229-234.

KEIL, A., and U. BOERMA. 1964. Microhardness and fluorine content of dentin and cementum. Dtsch. Zahnaerztl. Z. 19: 201-214.

KEITH, E.O., D.P. COSTA, and C.L. ORTIZ. 1981. A kinetic model of fasting metabolism in the northern elephant seal, p. 68. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA, University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

KEITH, E.O., S.D. PERNIA, R. CONDIT, and C.L. ORTIZ. 1979. Metabolism and recycling of glucose in northern elephant seals, p. 33. In Symposium: biology of marine mammals, Abstract. Presentations at the 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

KEITH, E.O., S.D. PERNIA, and C.L. ORITZ. 1980. Intermediary metabolism and bioenergetics of northern elephant seals during starvation. Fed. Proc. 39(3), Abstr. 3295.

KEIVER, K. and K. RONALD. 1981. Digestible energy in harp seals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. Biol. Oceanogr. Comm. 1981/N:-14.

KELLY, A.L., and D. JENSEN. 1960. Chronic aortitis in the Californian sea lion, Zalophus californianus. Nature (Lond.) 186: 731.

KENDREW, J.C. 1963. Myoglobin and the structure of proteins. Science (Wash. DC) 139: 1259-1266.

KENDREW, J.C., R.G. PARRISH, J.R. MARRACK, and E.S. ORLANS. 1954. The species specificity of myoglobin. Nature (Lond.) 174: 946-949.

KENIRY, M.A., T.M. ROTHGEB, R.L. SMITH, H.S. GUTOWSKY, and E. OLDFIELD. 1983. NMR studies of amino acids and proteins side chain mobility of methionine in the crystalline amino acids and in crystalline sperm whale, Physeter catodon, myoglobin. Biochemistry 22: 1917-1926.

KENYON, K.W. 1965. Food of harbor seals at Amchitka Island, Alaska. J. Mammal. 46: 103-104.

KENYON, K.W. 1969. The sea otter in the Pacific Ocean. U.S. Bureau of Sport Fisheries and Wildlife, Washington, DC. 352 p.

KEREM, D.H., and R.W. ELSNER. 1973. Cerebral tolerance to asphyxial hypoxia in the harbour seal. Respir. Physiol. 19: 188-199.

KEREM, D.H., R.W. ELSNER, and J.J. WRIGHT. 1971. Anaerobic metabolism of the brain in harbor seal during later stages of a maximum dive (Abstract) Fed. Proc. 30: 484.

KEREM, D.H., D.D.HAMMOND, and R.W. ELSNER. 1973. Tissue glycogen levels in the Weddell seal, Leptonychotes weddelli: a possible adaptation to asphyxial hypoxia. Comp. Biochem. Physiol. 45A: 731-736.

KERKHOFF, M., and J. DE BOER. 1982. Identification of chlordane compounds in harbour seals, Phoca vitulina, from the coastal waters of the Netherlands. Chemosphere 11: 841-846.

KERKHOFF, M., J. DE BOER, and J. GEERDES. 1981. Heptachlor epoxide in marine mammals. Sci. Total Environ. 19: 41-50.

KERLEY, G.I.H., and M.N. BESTER. 1983. A note on whole mass corrections from piecemeal determinations for fur seals, Arctocephalus spp. S. Afr. J. Wildl. Res. 13: 49-50.

KERRY, K.R., and M. MESSER. 1968. Intestinal glycosidases of three species of seals. Comp. Biochem. Physiol. 25: 437-446.

KEYES, M.C. 1965. Pathology of the northern fur seal. J. Am. Vet. Med. Assoc. 147: 1090.

KEYES, M.C. 1966. Immobilizing, transquillizing and anaesthetizing drugs used on fur seals (Callorhinus ursinus), p. 74-79. In C.E. Rice (ed.) Symposium: biological sonar and diving mammals, Proceedings of the 3rd annual conference on biological sonar and diving mammals, 23-26 May, 1966. Stanford Research Institute, Biological Sonar Laboratory, Fremont, CA.

KEYES, M.C. 1968. The nutrition of pinnipeds, p. 359-395. In R.J. Harrison, R.C. Hubbard, C.E. Rice and R.J. Schusterman (ed.) The behaviour and physiology of pinnipeds. Vol. 1. Appleton-Century-Crofts, New York, NY.

KEYES, M.C. 1971. Pathology, p. 7-11. In Fur seal investigations, 1969. U.S. Fish. Wildl. Serv. Spec. Sci. Rep. Fish. 628.

KEYES, M.C., E.J. BARRON, and A.J. ROSS. 1971a. Analysis of urine of the northern fur seal. J. Am. Vet. Med. Assoc. 159: 567-570.

KEYES, M.C., R.J. WURTMAN, C.A. ELDEN, C. CHOU, and R. MCGUIRE. 1971b. Seasonal fluctuations of hydroxy-indole levels in the pineal gland of the northern fur seal. J. Wildl. Dis. 7: 235.

KHARKOV, I.I. 1931. The ako oil melting plant. Sots. Rekonstr. Rybn. Khoz. Dal'nego Vost. 8-10: 91-93. (In Russian)

KHRISTOVA, P., and B. ATANASOV. 1982. Sperm whale oxymetoglobin oxidation in presence of zinc and gold ions. C.R. Acad. Bulg. Sci. 35: 521-524. (In Bulgarian)

KHUZIN, R.S., and A.V. IABLOKOV. 1963. On some features of digestive tract functioning in Cystophora cristata during its feeding on milk. Zool. Zh. 42: 1273-1275. (In Russian)

KIECKEBUSCH, E., E. KRUG, and K. LANG. 1960. The biological value of whale meat. Z. Ernaehrungswiss. 1: 45-47.

KILIAAN, H.P.L., and I. STIRLING. 1978. Observations on overwintering walruses on the eastern Canadian High Arctic. J. Mammal. 59: 197-200.

KIM, K.C. 1974. Mercury in tissues and lice of northern fur seals. Bull. Environ. Contam. Toxicol. 11: 281-284.

KIMURA, S., T. MIYAKI, Y. TAKEMA, and M. KUBOTA. 1981. Electrophoretic analysis of connectin from muscles of aquatic animals. Bull. Jpn. Soc. Sci. Fish. 47: 787-791.

KIMURA, T. 1974. Species specificities of heparins. J. Med. Soc. Toho Univ. 21: 164-170.

KING, J.E. 1964. Seals of the world. British Museum (Natural History), London. 154 p.

KING, J.E. 1983. Seals of the world. 2nd ed. British Museum (Natural History) and Oxford University Press, London. 240 p.

KINGSLEY, M.C.S. 1979. Fitting the van Bertalanffy growth equation to polar bear age, weight data. Can. J. Zool. 57: 1020-1025.

KINGSLEY, M.C.S., I. STIRLING, and W. CALVERT. 1982. The distribution and abundance of

seals in the high Arctic, 1980-1981. Report prepared for the Arctic Islands Operating Advisory Committee. Department of Indian and Northern Affairs, and Department of Fisheries and Oceans. Canadian Wildlife Service, Edmonton. 68 p.

KIRSCH, W., and H. JANTZEN. 1941. Über Rachitisentstehung und-Verhutung bei der Verfutterung von Walfischmehl an Schweine. Biedermann's Zentralbl. Abt. B 13: 180-188.

KISHORE, R., and V.P. GUINN. 1972. NSF baseline studies at the University of California at Irvine. Report 1972: 13 p. Available from NTIS as TID-26207 (Nucl. Sci. Abstr. 1973 27(2): 2310)

KITAGAWA, H., K. AOKI, and K. TACHIBANA. 1973. Liver hydrolysate. II. Effect of the liver hydrolysate of the whale in liver-tissue blood-flow of rats. Oyo Yakuri 7: 1315-1327.

KIZEVETTER, I.V. 1950. Technical and chemical characteristics of some far eastern pinnipeds. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 32: 169-172. (In Russian)

KIZEVETTER, I.V. 1953. Marine mammal oils. Primizdat., Vladivostok. (In Russian)

KLEIBER, M. 1965. Respiratory exchange and metabolic rate, p. 927-938. In W.O. Fenn and H. Rahn (ed.) Handbook of physiology. Sect. 3. Williams and Wilkins, Baltimore, M.D.

KLEINENBERG, S.E., A.V. YABLOKOV, B.M. BEL'KOVICH, and M.N. TARASEVICH. 1964. Beluga (Delphinapterus leucas) investigation of the species. Akad. Nauk SSSR Inst. Morfologii Zhivotnykh Im. A.N. Severtsova, Moscow, 450 p. Israel Program for Scientific Translations, Jerusalem, No. 1923, 1969. 376 p.)

KLEM, A. 1935. Studies in the biochemistry of whale oils. Hvalradets Skr. 11: 49-108.

KLEMM, P., F. POULSEN, M.K. HARBOE, and B. FOLTMANN. 1976. N-terminal amino acid sequence of pepsinogens from dogfish and seal and of bovine pepsinogen B. Acta Chem. Scand. B30: 979-984.

KLINKHART, E.G. 1966. The beluga whale in Alaska. Alaska Department of Fish and Game, Juneau, AK. 11 p.

KLOES, H.-G. 1979. Hand rearing of southern elephant seal, Mirounga leonina, at West Berlin Zoo, Germany. Int. Zoo Yearb. 19: 265-266.

KLOES, H.-G., and P. RAHN. 1975. On the care of and a partially successful breeding of southern elephant seals, Mirounga leonina, in the Berlin Zoo. Zool. Beitr. 21: 551-561.

KLONTZ, G.W. 1971. Aquatic animal medicine-overview. J. Am. Vet. Med. Assoc. 158: 1875.

KLUMOV, S.K. 1961. Plankton and the food of whalebone whales (Mystoceti). Tr. Inst. Okeanol. Akad. Nauk SSSR 51: 142-156.

KNAP, A.H., and T.D. JICKELLS. 1983. Trace metals and organochlorines in the goose-beaked whale, Ziphius cavirostris. Mar. Pollut. Bull. 14: 271-274.

KNOWLES, F., and L. VOLLRATH (ed.) 1974. Neurosecretion. The final neuroendocrine pathway. Sixth International Symposium, London, 1973. Springer-Verlag, New York, NY.

KNUDSEN, B. 1978. The budgets of polar bears, Ursus maritimus, on north Twin Island, James Bay, Canada, during summer. Can. J. Zool. 56: 1627-1628.

KOBAYASHI, Y., and H. KABENO. 1969. Antiulcerous mucoproteins from the digestive system of whales. Germ. Offen. 1,963,816 (Cl. C 08h), 23 July 1970, Japan. Appl. 26 Dec. 1968-04 Aug. 1969; 21 p.

KOEMAN, J.H. 1973. PCB in mammals and birds in the Netherlands, p. 35-43. In PCB Conference 2. National Swedish Environmental Protection Board, 4E.

KOEMAN, J.H, J.W.P.M. BRUS, J.J.M. DE GOEIJ, P.S. TJIOE, and K.J. VOLKERS. 1973a. Correlation between mercury and selenium in the tissues of marine mammals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mammal Comm. 1973/N:9.

KOEMAN, J.H., W.H.M. PEETERS, C.H.M. KOUDSTAALHOL, P.S. TJIOE, and J.J.M. DE GOEIJ. 1973b. Mercury-selenium correlations in marine mammals. Nature (Lond.) 245: 385-386.

KOEMAN, J.H., W.H.M. PEETERS, C.J. SMIT, P.S. TJIOE, and J.J.M. DE GOEIJ. 1972. Persistent chemicals in marine mammals. T.N.O. Nieuws 27: 570-578.

KOEMAN, J.H., W.S.M. VAN DE VEN, J.J.M. DE GOEIJ, P.S. TJIOE, and J.L. VAN HAAFTEN. 1975. Mercury and selenium in marine mammals and birds. Sci. Total Environ. 3: 279-287.

KOEMAN, J.H., and H. VAN GENDEREN. 1966. Some preliminary notes on residues of chlorinated hydrocarbon insecticides in birds and mammals in the Netherlands. J. Appl. Ecol. 3(suppl.): 99-106.

KOIDE, A., and Y. MATSUOKA. 1969. Fin whale pancreatic proteases. II. Purification of the pancreatic proteases. J. Biochem. (Tokyo) 66: 541-548.

KOIDE, A., and Y. MATSUOKA. 1970. Studies on the fin whale pancreatic proteases. III. Properties of purified fin whale anionic chymotrypsin. J. Biochem. (Tokyo) 68: 1-7.

KOIDE, A., and Y. MATSUOKA. 1971a. Fin whale pancreatic proteases. IV. Properties of purified fin whale cationic trypsin. Bull. Jpn. Soc. Sci. Fish. 37: 545-552.

KOIDE, A., and Y. MATSUOKA. 1971b. Fin whale pancreatic proteases. V. Properties of purified whale cationic chymotrypsin. Bull. Jpn. Soc. Sci. Fish. 37: 929-937.

KOLCHEV, V.V., and G. CHERNOMORSKI. 1939. An experiment for obtaining oil from seal fat by the cold method. Tr. Vses. Nauchno-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr. 9. (Bull. Mem. Univ. Nfld Mar. Sci. Res. Lab. 7(2): 4. (Summary))

KOLCHEV, V.V., and Z.V. MARIEVA. 1953. Technochemical composition of the sperm whale blubber and its changes at rendering. Tr. Vses. Nauchno-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr. 25: 151-158. (In Russian)

KOLESNIK, YU.A., and A.A. TIMOFEEMA. 1980. Some features of growth, nutrition and production of fur seal, Callorhinus ursinus of Tyuleny Island, Russian-S.F.S.R., U.S.S.R. Izv. Akad. Nauk SSSR Ser. Biol. (3): 433-441. (In Russian)

KOMORI, S., and E. MORITA. 1951. Natural resources of cholesterol. I. Sterol in sei whale brain. Kogyo Kagaku Zasshi 54: 413-414.

KONDO, H. and Z. NARITA. 1959. Nutrient from the brains of whales. Japan Patent 4794 (1959) June 9.

KONDRASHEV, S.L. 1980. Soviet-American symposium on physiology and biochemistry of adaptation in marine mammals (Nakhodka, 1979). Biol. Morya (Vladivost.) 1980: 75-79. (In Russian)

KONOGAYA, S. 1963. The N-terminal amino acid sequence of hemoglobin of bluewhite dolphin (Prodelphinus coeruleo-albus). J. Biochem. (Tokyo) 54: 189-190.

KOOYMAN, G.L. 1968. An analysis of some behavioural and physiological characteristics related to diving in the Weddell seal. Antarctic Res. Ser. 11: 227-261.

KOOYMAN, G.L. 1981. Leopard seal - Hydrurga leptonyx Blainville, 1820, p. 261-274. In S.H. Ridgway and R.J. Harrison (ed.) Handbook of marine mammals. Vol. 2. Seals. Academic Press, New York, NY.

KOOYMAN, G.L. 1981a. Weddell seal - Leptonychotes weddelli Lesson, 1826, p. 275-296. In S.H. Ridgway and R.J. Harrison (ed.) Handbook of marine mammals. Vol. 2. Seals. Academic Press, New York, NY.

KOOYMAN, G.L. 1981b. Crabeater seal - Lobodon carcinophagus (Hombron and Jacquinot, 1842), p. 221-235. In S.H. Ridgway and R.J. Harrison (ed.) Handbook of marine mammals. Vol. 2. Seals. Academic Press, New York, NY.

KOOYMAN, G.L., and H.T. ANDERSEN. 1969. Deep diving, p. 65-94. In H.T. Andersen (ed.) The biology of marine mammals. Academic Press, New York, NY.

KOOYMAN, G.L., M.A. CASTELLINI, and R.W. DAVIS. 1981. Late summer dives of Weddell seals. Antarct. J. U. S. 16: 153-154.

KOOYMAN, G.L., M.A. CASTELLINI, and R.W. DAVIS. 1981a. Physiology of diving in marine mammals. Annu. Rev. Physiol. 43: 343-356.

KOOYMAN, G.L., M.A. CASTELLINI, R.W. DAVIS, and R.A. MAUE. 1983. Aerobic diving limits of immature weddell seals, Leptonychotes weddelli. J. Comp. Physiol. 1518: 171-174.

KOOYMAN, G.L., and R.W. DAVIS. 1981. Feeding behaviour of female Antarctic fur seals, Arctocephalus gazella. Antarct. J. U. S. 15: 159-160.

KOOYMAN, G.L., R.W. DAVIS, and M.A. CASTELLINI. 1977. Thermal conductance of immersed pinniped and sea otter pelts before and after oiling with Prudhoe Bay crude, p. 151-157. In D.A. Wolfe (ed.) Fate and effect of petroleum hydrocarbons in the marine ecosystem of organisms, Proceedings of the Symposium 1976. Pergamon, Elmsford, NY.

KOOYMAN, G.L., and C.M. DRABEK. 1968. Observations on milk, blood and urine constituents of the Weddell seal. Physiol. Zool. 41: 187-194.

KOOYMAN, G.L., R.L. GENTRY, and W.B. McALISTER. 1976. Physiological impact of oil on pinnipeds. U.S. Dep. Inter. Bur. Land Manage. Outer Cont. Shelf Energy Assess. Program (OCSEAP), Final Rep. Res. Unit 71: 26 p.

KOOYMAN, G.L., D.H. KEREM, W.B. CAMPBELL, and J.J. WRIGHT. 1971. Pulmonary function in freely diving Weddell seals, Leptonychotes weddelli. Respir. Physiol. 12: 271-282.

KOOYMAN, G.L., J.P. SCHROEDER, D.M. DENISON, D.D. HAMMOND, J.J. WRIGHT, and W.P. BERGMAN. 1972. Blood nitrogen tensions of seals during simulated deep dives. Am. J. Physiol. 223: 1016-1020.

KOOYMAN, G.L., and E.E. SINNETT. 1982. Pulmonary shunts in harbour seals, Phoca vitulina, and sea lions, Zalophus californianus, during simulated dives to depth. Physiol. Zool. 55: 105-111.

KOOYMAN, G.L., E.A. WAHRENBROCK, M.A. CASTELLINI, R.W. DAVIS, and E.E. SINNETT. 1980. Aerobic and anaerobic metabolism during voluntary diving of Weddell seals: evidence of preferred pathways from blood chemistry and behavior. J. Comp. Physiol. 138: 335-346.

KOOYMAN, G.L., E.A. WAHRENBROCK, E.E. SINNETT, R.W. DAVIS, and M.A. CASTELLINI. 1978. Blood chemistry of freely diving Weddell seals. Antarct. J. U. S. 12: 158.

KORZHUEV, P.A. 1952. About forms of localization and quantity of hemoglobin in the blood of different animals. Usp. Sovrem. Biol. 33: 391-408. (In Russian)

KORZHUEV, P.A., N.N. BULATOVA, and T.N. GLAZOVA. 1979. Characteristics of the blood of Black Sea dolphins, p. 20-37. In P.A. Korzhuev (ed.) Dykhatel'nye Belki Nek. Grupp Sovrem. Zhivotn. Izd. Nauka, Moscow.

KORZHUEV, P.A., and T.N. GLAZOVA. 1967a. Quantitative characterization of blood and hemopoietic organs of the dolphins from the Black Sea, U.S.S.R. Zh. Evol. Biokhim. Fiziol. 3: 160-165. (In Russian)

KORZHUEV, P.A., and T.N. GLAZOVA. 1967b. The concentration of muscule hemoglobin in the muscles of marine mammals. Biokhimiya 32: 536-538. (In Russian)

KORZHUEV, P.A., and T.N. GLAZOVA. 1967c. Concentration of muscle hemoglobin in muscles of marine mammals. Biokhimiya 32: 651-654. (In Russian)

KORZHUEV, P.A., and T.N. GLAZOVA. 1971. Biochemical aspect of the adaptation of cetaceans, p. 130-135. In Morfol. Ekol. Mor. Mlekopitayushchikh. (In Russian)

KORZHUEV, P.A., and T.N. GLAZOVA. 1973. Biochemical aspects of cetacean adaptations, p. 190-195. In K.K. Chapskii and V.E. Sokolov (ed.) Morphology and ecology of marine mammals, seals, dolphins, porpoises. Halsted Press, New York, NY.

KOSAKAI, M., and Z. YOSIZAWA. 1982. High performance liquid chromatography of pyridylamino derivations of sulfated oligosaccharides in the deamination products of porcine and whale heparins. J. Biochem. (Tokyo) 92: 295-304.

KOSCHIER, F.J., R.W. ELSNER, D.F. HOLLEMAN, and S.K. HONG. 1978. Organic anion transport by renal cortical slices of the harbour seal (Phoca vitulina). Comp. Biochem. Physiol. 60A: 289-292.

KOSKI, W.R., and R.A. DAVIS. 1979. Distribution of marine mammals in northwest Baffin Bay and adjacent areas, May-October 1978. Report by LGL Ltd., Toronto, for Petro-Canada, Calgary, Alberta.

KOSTAREVA, G.V., A.A. BACHURIN, and N.V. SOKOLOVA. 1970. Strontium-90, strontium and calcium in some hydrobionts of the Sea of Okhotsk. Radiobiologiya 10: 145-147. (In Russian)

KOSYGIN, G.M. 1966. Size and weight of the bearded seal of the Bering Sea. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 58. (In Russian)

KOSYGIN, G.M. 1971. Feeding of the bearded seal, Erignathus barbatus nauticus (Pallas), in the Bering Sea during the spring-summer period. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 75: 144-151. (Can. Fish. Mar. Serv. Transl. Ser. 3747, 1976. 14 p.)

KOSYGIN, G.M., and V.N. GOL'TSEV. 1971. Data on the morphology and ecology of harbour seal of the Tatar Strait, p. 238-252. In K.K. Chapskii and E.S. Mil'chenko (ed.) Research on marine mammals. Tr. Atl. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 39. (Can. Fish. Mar. Serv. Transl. 3185, 1974: 384-410)

KOVACS, P. 1961. Sperm whale oil. Rev. Asoc. Arg. Quim. Tec. Ind. Cuero 2: 89-95. (In Spanish)

KRAFT, H. 1962. Blutuntersuchungen beim Europaeischen Seehund (Phoca vitulina L.). Nord. Veterinaermed. 14 (suppl.1): 174-179.

KREPS, E.M. 1941. Pecularities in the physiology of diving animals. Usp. Sovrem. Biol. 14: 454-464. (In Russian)

KRETCHMER, N. 1971. Memorial lecture on lactose and lactase. A historical prospective. Gastroenterology 61: 805-813.

KRETCHMER, N., and P. SUNSHINE. 1967. Intestinal disaccharidase deficiency in the sea lion. Gastroenterology 53: 123-129.

KRISTOFFERSEN, J., T. LUNAAS, and W. VELLE. 1961. Identification of 20 β-hydroxypregn-4-ene-3-one in luteal tissue from pregnant whales. Nature (Lond.) 190: 1009-1010.

KROGH, A. 1934. Physiology of a blue whale. Nature (Lond.) 133: 635.

KROGH, A. 1939. Osmotic regulation in aquatic animals. Cambridge University Press, Cambridge. (Reprinted 1965 by Dover, New York)

KROGH, A. 1941. The comparative physiology of respiratory mechanism. University of Pennsylvania Press, Philadelphia, PA.

KROGH, J., and J. IVERSEN. 1968a. Comparative studies of temperature gradients in the limbs and blubber of Arctic marine mammals, p. 158. In R.V. Alpha Helix Bering Sea Expedition, Project Reports of the R.V. Alpha Helix Bering Sea Expedition, February to October, 1968. Phase B. National Science Foundation, National Institute of Health, Washington, DC.

KROGH, J., and J. IVERSEN. 1968b. Metabolism of Arctic marine mammals, p. 156-157. In R.V. Alpha Helix Bering Sea Expedition, Project Reports of the R.V. Alpha Helix Bering Sea Expedition, February to October, 1968. Phase B. National Science Foundation, National Institute of Health, Washington, DC.

KRUSE, D.H. 1975. Swimming metabolism of California sea lions, Zalophus californianus.

M.Sc. Thesis, San Diego State University, San Diego, CA.

KRUSE,D.H., G.L. KOOYMAN, and R.E. CARPENTER. 1975. Swimming metabolism of California sea lions, Zalophus californianus. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on the biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

KRUTCHENSKII, G.V. 1968. Use of sodium chloride for extracting vitamin A from whale liver. Rybn. Khoz. 44(8): 61-64. (In Russian)

KRUTCHENSKII, G.V. 1973. Obtaining a protein vitamin concentrate. U.S.S.R. Patent 465,170 (Cl. A23j) 30 Mar 1975, Appl. 1,925,784, 15 May 1973. (Otkrytiya Izobret. Prom. Obraztsy Tovarnye Znaki 1975, 52(12), 8) (In Russian)

KRUTCHENSKII, G.V. 1978. Dry protein-vitamin preparation made from dried sea mammal livers. Rybn. Khoz. 54(1): 54-57. (In Russian)

KRUTCHENSKII, G.V., V.E. KULYASOVA, and E.D. IL'INA. 1977. Use of antioxidants for preventing the decomposition of vitamin A in fat. Rybn. Khoz 53(2): 75-78. (In Russian)

KRYLOV, V.I. 1965. Determination age, rate of growth and analysis of the age structure of the Pacific walrus catch, p. 201-210. In Morskie Mlekopitayuschie, Akad. Nauk SSSR. Izd. Nauka, Moskva. (Fish. Res. Board Can. Transl. Ser. 1004, 1968. 10 p.)

KRYLOV, V.I. 1971. The feeding of the Pacific walrus (Odebenus rosmarus divergens Ill.), p. 110-116. In K.K. Chapskii and E.S. Mil'chenko (ed.) Research on marine mammals. Tr. Atl. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 39. (Can. Fish. Mar. Serv. Transl. Ser. 3185, 1974: 177-189)

KRYLOV, V.I., and L.P. MEDVEDEV. 1971. Observations of cetaceans and pinnipeds during the 13th Soviet Antarctic expedition, p. 28-34. In K.K. Chapskii and E.S. Milchenko (ed.) Research on marine mammals. Tr. Atl. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 39. (Can. Fish. Mar. Serv. Transl. Ser. 3185, 1974: 42-53)

KUBOTA, K., and K. QUANBUNCHAN. 1965. Experimental studies on the tooth development of the fur seal and seals by means of EDTA-PB subcutaneous injection. Kokubyo Gakkai Zasshi 32: 85.

KUBOTA, M., S. KIMURA, and H. TAJIMA. 1967. Collagen on aquatic animals. III. Physiochemical properties of the pepsin-solubilized collagens of dolphin hide. Bull. Jpn. Soc. Sci. Fish. 33: 217-213.

KULU, D.D. 1972. Evolution and cytogenetics, p. 503-527. In S.H. Ridgway (ed.) Mammals of the sea: biology and medicine. C.C. Thomas, Springfield, IL.

KUMLIEN, L. 1879. Contribution of the natural history of Arctic America, made in connection with the Howgate Polar Expedition, 1877-78. U.S. Natl Mus. Bull. 15: 179 p.

KUO, H.L., and J.S. WENG. 1975. Temperature and frequency dependence of ultrasonic velocity and absorption in sperm and seal oils. J. Am. Oil Chem. Soc. 52: 166-169.

KUPKE, I.R., S. ZEUGNER, A. GOTTSCHALK, and B. KATHER. 1979. Differences in the lipid and lipoprotein concentrations of capillary and venous blood samples. Clin. Chim. Acta 97: 279-283.

KURTZ, D.A., and K.C. KIM. 1976. Chlorinated hydrocarbon and polychlorinated biphenyl residues in tissues and lice of northern fur seals, 1972. Pestic. Monit. J. 10: 79-83.

KUSAKABE, H., Y. KOJIMA, and T. KATAYAMA. 1962. Anserine content of whales. Rikagaku Kenkyusho Hokoku 38: 106-111.

KUSAKARI, H., and H. TSUTSUI. 1927. Untersuchungen uber Cetaceca. XXXVIII. Uber Calcium, Magnesium und Phosphor in verschiedenen Organen. (Investigation of Cetacea. XXXVIII. Ca, Mg, and P in various organs.) Jpn. J. Med. Sci. Trans. II. Biochem. 1(3): 245-246.

KUWADA, T., and H. KANEYUKI. 1952. Malodorous constituent of hardened oil. J. Oil Chem. Soc. Japan 1: 71-73.

KUZIN, A.E. 1971. The morphologic pattern of blood in the ontogeny of fur seals, p. 102-116. In V.A. Arseniev and E.A. Tikhomirov (ed.) Morskie mlekopitayushchie (Kotiki i tyuleni) [Marine Mammals (fur seals and seals)] Tr. Vses. Nauchno-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr., 80., Izv. Tikhookean Nauchno-Issled Inst. Rybn. Khoz. Okenogr. 82. (In Russian)

KUZIN, A.E. 1972. Ecological-morphological and age pecularities of red blood in embryo fur seals (Callorhinus ursinus). Teriologia (Novoskbirsk) 1. (In Russian)

KUZIN, A.E., and M.K. MAMINOV. 1981. The morphology of blood and arterial system in Ursus arctos, Carnivora, Ursidae. Zool. Zh. 60: 1078-1082. (In Russian)

KUZIN, A.E., and A.S. SOKOLOV. 1970. Features of red blood cells in embryos and newborn pups of northern fur seals (Callorhinus ursinus L.). Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 70: 44-51. (In Russian)

KUZNETSOV, B.A. 1962. Fat deposition in mammals and the effect of it on the animal's ecology. Izv. Timiryazev. S.-Kh. Akad. 6: 120-125. (In Russian)

KUZNETSOV, V.B. 1974. Methods for investigation of chemoreception in Black Sea bottle-nose dolphin (Tursiops truncatus), p. 147-153. In V.E. Sokolov (ed.) Morfol., Fiziol. Akust. Morsk. Mlekopitayushchikh. Izd. Nauka, Moscow. (In Russian)

KUZNETSOV, V.B. 1979. Chemoreception of Black Sea dolphins: bottle-nose dolphin (Tursiops truncatus Mont.), common dolphin (Delphinus delphis L.) and porpoise (Phocoena phocoena L.). Dokl. Akad. Nauk SSSR 249: 1498-1500. (In Russian)

KYTE, R.M. 1956. Technological studies on the processing of sea lions. Commer. Fish. Rev. 18(6): 1-7.

LADD, M., L.G. RAISZ, G.H. CROWDER Jr., and L.B. PAGE. 1951. Filtration rate and water diuresis in the seal, Phoca vitulina. J. Cell. Comp. Physiol.38: 157-164.

LAL MOHAN, R.S. 1982. A note on the fetuses of the dolphins, Tursiops aduncus and Sousa plumbea, from the southwest coast of India. Indian J. Fish. 29: 249-252.

LA MAR, G.N., N.L. DAVIS, D.W. PARISH, and K.M. SMITH. 1983. Heme orientational disorder in reconstituted and native sperm whale myoglobin proton NMR characterizations by heme methyl deuterium labeling in the metcyanoprotein. J. Mol. Biol. 168: 887-896.

LAMSON, P.D., M.E. GREIG, and C.J. HOBDY. 1951. Modification of barbituate anaestnesia by glucose, intermediary metabolites and certain other substances. J. Pharmacol. Exp. Therap. 103: 460-470.

LANDER, R.H. 1979. Alaskan or northern fur seal. In Mammals in the seas. Vol. 2. FAO Fish. Ser. 5.

LANDER, R.H. 1981. A life table and biomass estimate for Alaskan fur seals. Fish. Res. 1: 55-70.

LANDIS, A.T. 1971. Oil spill harmless to seals. Undersea Technol. 12(7):17.

LANDO, G., J.A. BERZOFSKY, and M. REICHLIN. 1982. Antigenic structure of sperm whale myoglobin. I. Partition of specificities between antibodies with peptides and native protein. J. Immunol. 129: 206-211.

LANDO, G., and M. REICHLIN. 1982. Antigenic structure of sperm whales myoglobin. II. Characterization of antibodies preferentially reactive with peptides arising in response to immunization with the native protein. J. Immunol. 129: 212-216.

LANDY, R.B. 1980. A review of neoplasia in marine annimals (Pinnipedia and Cetacea), p. 579-584. In Montali and G. Migaki (ed.) The comparative pathology of zoo animals. Smithsonian Institution Press, Washington, DC.

LANE, R.A.B., R.J.H. MORRIS, and J.W. SHEEDY. 1972. A hematological study of the southern elephant seal, Mirounga leonina (Linn.). Comp. Biochem. Physiol. 42A: 841-850.

LANMAN, J.T. 1970. Delayed implantation of the blastocyst: an exploration of its effects on the developing embryo. Am. J. Obstet. Gynecol. 106: 463468.

LANTOS, C.P., and M.A. BORRUEL. 1973. Adaptive aspects of the biosynthesis of corticosteroids of a marine mammal the Weddell seal. Acta Physiol. Lat. Am. 23: 457-458.

LANTOS, C.P., M.C. DAMASCO, P. BORRUEL, and M. BORRUEL. 1974. In vitro investigations of radioactive corticosteroids in Leptonychotes weddelli I. Gen. Comp. Endocrinol. 22: 399.

LANTZ, A.W., and C. GUNASEKERA. 1956. Commercial utilization of dolphins (porpoises) in Ceylon. Ceylon Dep. Fish. Bull. 3: 13-14.

LAPENNAS, G.N., and R.B. REEVES. 1982. Respiratory properties of blood of the gray seal, Halichoerus grypus. J. Comp. Physiol. 149: 49-56.

LARSEN, T. 1971. Capturing, handling and marking polar bears in Svalbard. J. Wildl. Manage. 35: 27-36.

LASSEN, S., E.K. BACON, and H.J. DUNN. 1951. An evaluation of condensed whale solubles as a supplement in poultry nutrition. Poult. Sci. 30: 422-425.

LATEGAN, A.W. 1948. Production of vitamin A oils in South Africa. S. Afr. Ind. Chem. 2: 39.

LAUER, B.H., and B.E. BAKER. 1969a. Whole milk: I. Fin whale (Balaenoptera physalus) and beluga whale (Delphinaptera leucas) milk: gross composition and fatty acid constitution. Can. J. Zool. 47: 95-97.

LAUER, B.H., and B.E. BAKER. 1969b. Mineral constitution of the milks of some Arctic species. Can. J. Zool. 47: 185-187.

LAUER, B.H., and B.E. BAKER. 1972. Polyacrylamide gel disc electrophoresis of caseins isolated from milks of different species. Comp. Biochem. Physiol. 428: 323-328.

LAUER, B.H., and B.E. BAKER. 1977. Amino acid composition of casein isolated from milks of different species. Can. J. Zool. 55: 231-236.

LAVIGNE, D.M. 1982. Pinniped thermoregulation: comments on the effects of cold on the evolution of pinniped breeding systems. Evolution 36: 409-414.

LAVIGNE, D.M., W.W. BARCHARD, S. INNES, and N.A. ORITSLAND. 1983. Pinniped bioenergetics. Paper No. ACMRR/MM/SC/112.

Scientific Consultation on Marine Mammals, Bergen, Norway, August 31 - 9 September, 1976.

LAVIGNE, D.M., C.D. BERNHOLZ, and K. RONALD. 1977. Functional aspects of pinniped vision, p. 135-173. In R.J. Harrison (ed.) Functional anatomy of marine mammals. Vol. 3. Academic Press, London.

LAVIGNE, D.M., J.P. BOGART, R. DANZMAN, W.W. BARCHARD, M. EARLE, and R.G.H. DOWNER. 1978. Genetic variability in northwest Atlantic harp seals, Pagophilus groenlandicus. Int. Comm. Northwest Atl. Fish. Spec. Meet. Stacres, Nov. 1978, Res. Doc., 78/XI/90.

LAVIGNE, D.M., and K. RONALD. 1975. Pinniped visual pigments. Comp. Biochem. Physiol. 52B: 325-329.

LAVIGNE, D.M., and R.E.A. STEWART. 1979. Energy content of harp seal placentas. J. Mammal. 60: 854-856.

LAVIGNE, D.M., R.E.A. STEWART, and F. FLETCHER. 1982. Changes in composition and energy content of harp seal, Phoca groenlandica, milk during lactation. Physiol. Zool. 55: 1-9.

LAWRENCE, M., and R.C. DOUGHERTY. 1981. Identification of polychlorinated dibenzofurans in environmental samples. Nature (Lond.) 292: 524-526.

LAWS, R.M. 1953. The elephant seal (Mirounga leonina Linn.) I. Growth and age. Falkl. Isl. Depend. Surv. Sci. Rep. 8: 1-62.

LAWS, R.M. 1953a. A new method of age determination in mammals with special reference to the elephant seal (Mirounga leonina Linn.). Falkl. Isl. Depend. Surv. Sci. Rep. 2: 1-11.

LAWS, R.M. 1956. Growth and sexual maturity in aquatic animals. Nature (Lond.) 178: 193-194.

LAWS, R.M. 1977. Seals and whales of the southern ocean. Philos. Trans. R. Soc. Lond. B. Biol. Sci. 279: 81-96.

LAWS, R.M. 1981. Biology of Antarctic seals. Sci. Prog. 67: 377-379.

LEATHERLAND, J.F., and K. RONALD. 1979. Structure of the testes in neonate and adult harp seals, Pagophilus groenlandicus. Cell Tissue Res. 201: 45-49.

LEATHERLAND, J.F., and K. RONALD. 1981. Plasma concentrations of thyroid hormones of captive and feral polar bear (Ursus maritimus). Comp. Biochem. Physiol. 70A: 575-577.

LEATHERLAND, J.F., and K. RONALD. 1983. Immunohistochemical identification of cell types in the pars distalis of harp seals, Phoca groenlandica. Acta Zool. (Stockh.) 64: 97-105.

LEATHERWOOD, S., D.K. CALDWELL, and H.E. WINN. 1976. Whales, dolphins, and porpoises of the western north Atlantic: a guide to their identification. U.S. Natl Mar. Fish. Serv. Circ. 396: 176 p.

LEATHERWOOD, S., and W.E. EVANS. 1979. Some recent uses and potentials of radiotelemetry in field studies of cetaceans, p. 1-31. In H.E. Winn and B.L. Olla (ed.) Behavior of marine animals. Vol. 3. Cetaceans. Plenum, New York, NY.

LEATHERWOOD, S., and W.A. WALKER. 1973. The northern right whale dolphin, Lissodelphis borealis, in the eastern north Pacific, p. 85-141. In H.E.Winn and B.L. Olla (ed.) Behavior of marine mammals. Vol. 3. Cetaceans. Plenum, New York, NY.

LE BOEUF, B.J. 1971. Oil contamination and elephant seal mortality: a "negative" finding, p. 277-285. In D. Straughan (ed.) Biological and oceanographical survey of the Santa Barbara channel oil spill, 1969-1970. Vol. 1. University of South California, Allan Hancock Foundation, Los Angeles, CA.

LE BOEUF, B.J., and M.L. BONNELL. 1971. DDT in California sea lions. Nature (Lond.) 234: 108-110.

LE BOEUF, B.J. and C.L. ORTIZ. 1977. Composition of elephant seal milk. J. Mammal. 58: 683-685.

LEE, J., K. RONALD, and N.A. ORITSLAND. 1977. Some blood values of wild polar bears. J. Wildl. Manage. 41: 520-526.

LEE, J., R. SCHWEINBURG, F. KERNAN, and J.C. HAIGH. 1968. Immobilization of polar bears with ketamine hydrochloride and xylazine hydrochloride. J. Wildl. Dis. 17: 331-336.

LEE, R.F. 1974. Lipid composition of the copepod, Calanus hyperborealis, from the Arctic Ocean changes with season and depth. Mar. Biol. (Berl.) 26: 313-318.

LEE, R.W.K., and E. OLDFIELD. 1982. Nuclear magnetic resonance of hemoprotein crystals. Structure of the heme in Physeter catodon ferrimyoglobin and an analysis of hyperfine shift. J. Biol. Chem. 259: 5023-5029.

LEE, S.S., B.R. MATE, K.T. VON DER TRENCK, R.A. RIMERMAN, and D.R. BUHLER. 1977a. Metallothionein and the subcellular localization of mercury and cadmium in the California sea lion. Comp. Biochem. Physiol. 57C: 45-53.

LEEDAR, J.D., and J.H. BRADBURY. 1971. Discontinuous nature of epicuticle on the surface of keratin fibers. Text. Res. J. 41: 563-568.

LEGENDRE, R. 1947. Rendering of seal oil. Append. No. 18. In Fish. Res. Board Can. Gaspe Fish. Exp. Stn. Annu. Rep., 1947.

LEHMAN, J.W., and T.J. PETERLE. 1969. DDT in Cetacea. Invest. Cetacea 3: 349-350.

LEHMAN, L.D. 1980. The primary structure of the major component myoglobin of the minke, humpback and goose-beaked whales. Ph.D. Thesis, Indiana University, Bloomington, IN. 263 p. (Diss. Abstr. Int. Ser. B. 41: 169, 1980. (University Microfilms, Order No. 80-16452)

LEHMAN, L.D., B.N. JONES, F.E. DWULET, R.A. BOGARDT, Jr, and F.R.N. GURD. 1980. Complete amino acid sequence of the major component myoglobin from the goose-beaked whale, Ziphius cavirostris. Biochim. Biophys. Acta 625: 221-229.

LEITH, D.E., and J.D. BRAIN. 1968. Anesthesia for pinnipeds, p. 161-162. In R.V. Alpha Helix Bering Sea Expedition, Project Report of the R.V. Alpha Helix Bering Sea Expedition, February to October, 1968. Phase B. National Science Foundation, National Institute of Health. Washington, DC.

LENFANT, C. 1969a. Physiological properties of blood of marine mammals, p. 95-116. In H.T. Anderson (ed.) The biology of marine mammals. Academic Press, New York, NY.

LENFANT, C., R.W. ELSNER, G.L. KOOYMAN, and C.M. DRABEK. 1969. Respiratory function of blood of the adult and fetal Weddell seal, Leptonychotes weddelli. Am. J. Physiol. 216: 1595-1597.

LENFANT, C., R.W. ELSNER, G.L. KOOYMAN, and C.M. DRABEK. 1970. Tolerance to sustained hypoxia in the Weddell seal, Leptonychotes weddelli, p. 471-476. In M.W. Holdgate (ed.) Antarctic ecology, Vol. 1. Academic Press, London.

LENFANT, C., and K. JOHANSEN. 1968. Morphological and chemical properties of the blood of some pinnipeds, p. 168. In R.V. Alpha Helix Bering Sea Expedition, Project Reports of the R.V. Alpha Helix Bering Sea Expedition, February to October, 1968. Phase B. National Science Foundation, National Institute of Health. Washington, DC.

LENFANT, C., K. JOHANSEN, and J.D. TORRANCE. 1970a. Gas transport and oxygen storage capacity in some pinnipeds and sea otter. Respir. Physiol. 9: 277-286.

LENFANT, G., D.W. KENNEY, and C. AUCUTT. 1968. Respiratory function in the killer whale, Orcinus orca (Linnaeus). Am. J. Physiol. 215: 1506-1511.

LENFANT, J.R., R.J. HENSEL, J.R. GILBERT, and F.E. SORENSEN. 1980. Population characteristics of Alaskan polar bears, p. 109-115. In C.J. Martinka and K.L. McArthur (ed.) Bears - their biology and management. U.S. Government Printing Office, Washington, DC.

LENTFER, J.W. 1968. A technique for immobilization and marking polar bears. J. Wildl. Manage. 32: 317-321.

LENTFER, J.W. 1976. Environmental contaminants and parasites in polar bears. Alaska Federal Aid in Wildlife Restoration Final Report. 22 p.

LENTFER, J.W. 1983. Alaskan polar bear movements from mark and recovery. Arctic 36: 282-288.

LENSINK, C.J. 1961. Status report: beluga studies. Unpublished manuscript. Division of Biological Research, Alaska Department of Fish and Game, Juneau, Alaska. 20 p.

LEONE, C.A., and A.L. WIENS. 1956. Comparative serology of carnivores. J. Mammal. 37: 11-23.

LEONOV, V.P., and I.S. SHESTAKOVA. 1962. A study of products of oxidation of seal oil by means of chromatographic methods. Nauchn. Tr. Mosk. Teckhnol. Inst. Legk. Prom. 25: 27-32. (In Russian)

LESCH, P. 1969. The development of the neutral lipids and fatty acids in the brain of man, whales and dolphins. Clin. Chim. Acta 25: 269-282.

LESCH, P., and K. BERNHARD. 1966. Brain lipids of a whale (Megaptera novaeangliae Borowsky). Helv. Chim. Acta 49: 1607-1611.

LESCH, P., and K. BERNHARD. 1968. Composition of neutral lipids and their fatty acid from whale brains. II. Finback (Balaenoptera physalus). Helv. Chim. Acta 51: 652-660.

LESCH, P., S. NEUHAUS-MEIER, and K. BERNHARD. 1968. Composition of neutral lipids and other fatty acids from whale brains. III. Globicephalus malaena brains. Helv. Chim. Acta 51: 1655-1662.

LEVIT, M.S., and G.F. VASIL'EVA. 1965. Separation of fatty acids of sperm whale fat and oils by centrifuging. Maslo-Zhir. Promst. 31: 19-21.

LEWIS, F. 1930. Seals on the Victorian Coast and their feeding habits. Aust. Mus. Mag. 4: 39-44.

LEWIS, J.H. 1964. Studies on the plasma proteins of various vertebrates, p. 149-154. In H. Peeters (ed.) Protides of the biological fluids. Elsevier, Amsterdam.

LEWIS, J.H. 1973. Variations in abilities of animal fibrinogens to clump Staphlococci. Thromb. Res. 3: 419-424.

LEWIS, J.H. 1975. Comparative hematology: mammalian platelets, p. 18-23. In Platelets, Proceedings of the international symposium on blood platelets, 1974. Excerpta Med. Int. Congr. Ser. 375.

LEWIS, J.H. 1976. Cross-immunoreactivities of mammalian fibrinogens. Thromb. Res. 9: 473-478.

LEWIS, J.H., W.L. BAYER, and I.L.F. SZETO. 1969. Coagulation factor 12 deficiency in the porpoise, Tursiops truncatus. Comp. Biochem. Physiol. 31: 667-670.

LEWIS, R.W., and J.W. LENTFER. 1967. The vitamin A content of polar bear liver: range and variability. Comp. Biochem. Physiol. 22: 923-926.

LEWIS, J.H., and J.H. WILSON. 1973. Species variations in ability to clump Staphlococci. Fed. Proc. 32(3, Part 1): 290.

LIBERTI, A., G.P. CARTONI, and U. PALLOTTA. 1958. Vapor-phase chromatography of the methyl esters of fatty acids and their quantitative determination in fats by automatic electrometric titration. Ann. Chim. 48: 4049.

LIDICKER, JR., W.Z., R.D. SAGE. and D.G. CALKINS. 1981. Biochemical variations in northern sea lions from Alaska, p. 231-241. In M.H. Smith and J. Joule (ed.) Mammalian population genetics, papers of the symposium, 1978. University of Georgia Press, Athens, GA.

LIGGINS, G.C., J.T. FRANCE, B.S. KNOX, and W.M. ZAPOL. 1979. High corticosteroid levels in plasma of adult and fetal Weddell seal (Leptonychotes weddelli). Acta Endocrinol. 90: 718-726.

LIGGINS, G.C., J. QVIST, P.W. HOCHACHKA, B.J. MURPHY, R.K. CREASY, R.C. SCHNEIDER, M.Y. SNIDER, and W.M. ZAPOL. 1980. Fetal cardiovascular and metabolic responses to simulated diving in the Weddell seal. J. Appl. Physiol. Respir. Environ. Exercise Physiol. 49: 424-430.

LINCOLN, D.R., D.T. EDMUNDS, T.J. GRIBBLE, and H.C. SCHWARTZ. 1973. Hemoglobins of pinnipeds. Blood 41: 163-170.

LING, J.K. 1965a. Hair growth and molting in the southern elephant seal, Mirounga leonina (Linn.), p. 525-544. In A.G. Lyne and B.F. Short (ed.) Biology of the skin and hair growth, Proceedings of the symposium at Canberra, Australia, 22-28 August, 1964. Angus and Robertson, Sydney.

LING, J.K. 1965b. The integument and moulting process of the southern elephant seal, Mirounga leonina (Linn.). Ph.D. Thesis, Australian National University, Canberra.

LING, J.K. 1965c. Functional significance of sweat glands and sebaceous glands of seals. Nature (Lond.) 208: 560-562.

LING, J.K. 1966. The skin and hair of the southern elephant seal, Mirounga leonina (Linn.). The facial vibrissae. Aust. J. Zool. 14: 855-866.

LING, J.K. 1968. The skin and hair of the southern elephant seal, Mirounga leonina (L.). 3. Morphology of the adult integument. Aust. J. Zool. 16: 629-645.

LING, J.K. 1969. A review of ecological factors affecting the annual cycle in island populations of seals. Pac. Sci. 23: 399-413.

LING, J.K. 1970. Pelage and molting in wild mammals with special reference to aquatic forms. Q. Rev. Biol. 45: 16-54.

LING, J.K., and C.E. BUTTON. 1975. The skin and pelage of grey seal pups (Halichoerus grypus Fabricus): with a comparative study of foetal and neonatal moulting in the Pinnipedia. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 112-132.

LING, J.K., and D.G. NICHOLLS. 1963. Immobilization of elephant seals using succinylcholine chloride. Nature (Lond.) 200: 1021-1022.

LING, J.K., D.G. NICHOLLS, and C.D.B. THOMAS. 1967. Immobilization of southern elephant seal with succinylcholine chloride. J. Wildl. Manage. 31: 468-479.

LING, J.K., and C.D.B. THOMAS. 1967. The skin and hair of the southern elephant seal, Mirounga leonina (L.). 2. Prenatal and early post-natal development and moulting. Aust. J. Zool. 15: 349-365.

LINZELL, J.L., and M. PEAKER. 1971. Mechanism of milk secretion. Physiol. Rev. 51: 564-597.

LITCHFIELD, C. 1968. Predicting the positional distribution of docosahexaenoic and docosapentaenoic acids in aquatic animal triglycerides. Lipids 3: 417-419.

LITCHFIELD, C. 1972. Analysis of triglycerides. Academic Press, New York, NY. 355 p.

LITCHFIELD, C. 1973. Taxonomic patterns in the triglyceride structure of natural fats. Fette Seifen Anstrichm. 75: 223-231.

LITCHFIELD, C., and R.G. ACKMAN. 1973. Chromatographic analysis of isomeric isovalerate and isoamyl wax esters. J. Chromatogr. 75: 137-140.

LITCHFIELD, C., R.G. ACKMAN, J.C. SIPOS, and C.A. EATON. 1971. Isovaleryl triglycerides from the blubber and melon oils of the beluga whale (Delphinapterus leucas). Lipids 6: 674-681.

LITCHFIELD, C., and A.J. GREENBERG. 1974. Comparative lipid patterns in the melon fats of dolphins, porpoises and toothed whales. Comp. Biochem. Physiol. 47B: 401-407.

LITCHFIELD, C., and A.J. GREENBERG. 1979. Compositional topography of melon lipids in the Amazon River dolphin, Inia geoffrensis: implications for echolocation. Comp. Biochem. Physiol. 63A: 183-187.

LITCHFIELD, C., A.J. GREENBERG, R.G. ACKMAN, and C.A. EATON. 1978. Distinctive medium

chain wax esters, triglycerides and diacylglyceryl ethers in the head fats on the Pacific beaked whale, Berardius bairdi. Lipids 13: 860-866.

LITCHFIELD, C.A., A.J. GREENBERG, D.K. CALDWELL, M.C. CALDWELL, J.C. SIPOS, and R.G. ACKMAN. 1975. Comparative lipid patterns in accoustical and nonaccoustical fatty tissues of dolphins, porpoises and toothed whales. Comp. Biochem. Physiol. 50B: 591-597.

LITCHFIELD, C., R. KAROL, and A.J. GREENBERG. 1973. Compositional topography of melon lipids in the Atlantic bottle-nosed dolphin, Tursiops truncatus. Implications for echo location. Mar. Biol. (Berl.) 23: 165-169.

LITCHFIELD, C., J. KINNEMAN, R.G. ACKMAN, and C.A. EATON. 1971a. Comparative lipid patterns in two freshwater dolphins, Inia geoffrensis, and Sotalia fluviatilis. J. Am. Oil Chem. Soc. 48: 91A.

LLOYD, A.G., K.S. DODGSON, and R.G. PRICE. 1963. Comparative studies on cartilage aminopolysaccharide sulfates. I. Polysaccharides from shark, skate, dogfish and fin whale. Biochim. Biophys. Acta 69: 496-504.

LLUCH BELDA, D. 1970. Growth and mortality of the California sea lion (Zalophus californianus californianus). An. Esc. Nac. Cienc. Biol. Mex. 18: 167-189.

LOCK, J.W., and S.R.B. SOLLY. 1976. Organochlorine residues in New Zealand birds and mammals. 1. Pesticides. N. Z. J. Sci. 19: 43-51.

LOCKLEY, R.M. 1958. Seal marking, 1957. Nature (Wales) 4: 536-543.

LOCKWOOD, A.P.M. (ed.) 1976. Effects of pollutants on aquatic organisms. Cambridge University Press, New York, NY. (Society for Experimental Biology, Seminar Series)

LOCKYER, C. 1975. Estimates of growth and energy budget for the sperm whale, Physeter catodon. FAO, Scientific Consultation on Marine Mammals, Bergen, Norway, 31 August - 9 September 1976, document ACMRR/MM/SC/38.

LOCKYER, C. 1976. Body weights of some species of large whales. J. Cons. Int. Explor. Mer 36: 259-273.

LOCKYER, C. 1976a. Growth and energy budgets of large baleen whales from the southern hemisphere. FAO, Scientific Consultation on Marine Mamamls, Bergen, Norway, 31 August - 9 September 1976, ACMRR/MM/SC/41.

LOCKYER, C. 1977. Some estimates of growth in the sei whale, Balaenoptera borealis. Int. Whaling Comm. Rep. Comm. 1: 58-62.

LOCKYER, C. 1978. A theoretical approach to the balance between growth and food consumption in fin and sei whales, with special reference to the female reproductive cycle. Int. Whaling Comm. Rep. Comm. 28: 243-249.

LOCKYER, C. 1981. Growth and energy budgets of large baleen whales from the southern hemisphere, p. 379-487. In Mammals in the seas. Vol. 3. FAO Fish. Ser. 5.

LOK, C.M., and B. FOLKERSMA. 1979. Composition of wax esters and triacylglycerols in the melon and blubber fats of a young Sowerby's whale, Mesoplodon bidens. Lipids 14: 872-875.

LOMBARDI, R., F. HAUTBOUT, F. FAWAZ, M. CHOIX, and F. PUISIEUX. 1971. Analysis of ointments, oils and waxes. X. Composition of Arctocephalus australis oil. Ann. Pharm. Fr. 29: 345-352.

LOUGHLIN, T. 1977. Activity patterns and habitat partitioning and grooming behaviour of the sea otter, Enhydra lutris, in California. Ph.D. Thesis, University of California, Los Angeles, CA.

LOUGHLIN, T.R. 1979. Radio telemetric determination of the 24-hour feeding activities of sea otters, Enhydra lutris, p. 717-724. In C.J. Amlaner and D.W. MacDonald (ed.) Handbook on biotelemetry and radio tracking. Pergamon, New York, NY.

LOUGHREY, A.G. 1959. Preliminary investigation of the Atlantic walrus, Odebenus rosmarus rosmarus (Linnaeus). Can. Wildl. Serv. Wildl. Manage. Bull. Ser. 1, 14: 123 p.

LOVERN, J.A. 1949. Fish oils. J. Oil Colour Chem. Assoc. 32 (345): 113-122.

LOVERN, J.A. 1964. The lipids of marine organisms. Oceanogr. Mar. Biol. Annu. Rev. 2: 169-191.

LOWELL, W.R. and W.F. FLANIGAN. 1980. Marine mammal chemoreception. Mammal Rev. 10: 53-59.

LOWRANCE, P.B., J.F. NICKEL, C.M. SMYTHE, and S.E. BRADLEY. 1956. Comparison of effect of anoxic anoxia and apnea on the renal function in the harbour seal (Phoca vitulina L.). J. Cell. Comp. Physiol. 48: 35-49.

LOWRY, F. and F.H. FAY. 1981. Distribution and feeding of walruses in Bristol Bay, Alaska, p. 76. In Symposium: biology of marine mammals, Abstracts. 4th Biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

LOWRY, L.F. and K.J. FROST. 1981. Feeding and trophic relationships of phocid seals and walruses in the eastern Bering Sea, p. 813-824. In D.W. Hood and J.A. Calder (ed.) The eastern Bering Sea shelf:

oceanography and resources, Vol. 2. University of Washington Press, Seattle, WA.

LOWRY, L.F., K.J. FROST, and J.J. BURNS. 1977. Trophic relationships among ice inhabiting phocid seals. Final Report of Beaufort Sea activities, p. 391-432. In Environmental assessment of the Alaskan Continental Shelf. Vol. 1. U.S. National Oceanographic and Atmospheric Administration, Boulder, CO.

LOWRY, L.F., K.J. FROST, and J.J. BURNS. 1978. Food of ringed seals and bowhead whales near Point Barrow, Alaska. Can. Field-Nat. 92: 67-70.

LOWRY, L.F., K.J. FROST, and J.J. BURNS. 1979. Feeding of bearded seals in the Bering and Chukchi Seas and implications with respect to carrying capacity, p. 38. In Symposium: biology of marine mammals, Abstracts. Presentations at the 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

LOWRY, L.F., K.J. FROST, and J.J. BURNS. 1980a. Feeding of bearded seals, Erignathus barbatus, in the Bering Sea and Chukchi Sea and trophic interaction with Pacific walruses, Odebenus rosmarus. Arctic 33: 330-342.

LOWRY, L.F., K.J. FROST, and J.J. BURNS. 1980b. Variability in the diet of ringed seal, Phoca hispida, in Alaska. U.S.A. Can. J. Fish. Aquat. Sci. 37: 2254-261.

LOWRY, L.F., K.J. FROST, D.G. CALKINS, G.L. SWARTZMAN, and S. HILL. 1982. Feeding habits, food requirements, and status of Bering Sea marine mammals. Final Report to North Pacific Fisheries Management Council. Anchorage, AK. 500 p.

LOWRY, R.R., and L.J. TINSLEY. 1974. Bromine levels in lipids of marine organisms. J. Am. Oil Chem. Soc. 51: 520A.

LU, P.-H., AND L-S. YANG. 1980. Comparative studies on the lipid components and properties of the Baiji (Lipotes vexillifer) and some other dolphins. Tung Wu Hsueh Pao 26: 306-310.

LUDOWIEG, J.J., M.L. SHARMA, A. HASHIMOTO, E. EMMONS, I. NISHIZAWA, and K. OKAZAKI. 1972. Mammalian intervertebral disk. Composition of the nucleus pulposus of whales during development and aging. Connect. Tissue Res. 1: 79-91.

LUECKE, R.H., V. NATARAJAN, and F.E. SOUTH. 1975. A mathematical biothermal model of the California sea lion. J. Therm. Biol. 1: 35-45.

LUKHANIN, V.YA. 1983. Intestinal anatomy of Black Sea bottlenosed dolphin. Vestn. Zool. (3): 63-67.

LUNDBERG, D.A., R.A. NELSON, H.W. WAHNER, and J.D. JONES. 1976. Protein metabolism in the black bear before and during hibernation. Mayo Clin. Proc. 51: 716-722.

LUNDE, G. 1970. Analysis of arsenic and selenium in marine raw materials. J. Sci. Food Agric. 21: 242-247.

LYALL-WATSON, V. (ed.) 1962. International survey of hand-rearing techniques and animal milk analysis. Int. Zoo Yearb. 4: 282-342.

LYDEKKER, R. 1895. A handbook to the British Mammalia. London.

LYGONIS, C. 1966. Effect of dietary whale fat on serum cholesterol levels. Frodskaparrit Ann. Soc. Sci. Faeroensis 15: 70-73.

LYNCH, P.B., W.J. O'CONNELL, and P.J. CAFFREY. 1970. Nutritional evaluation of Irish meat and bone meals. I. Utilization of meat and bone meal protein by rats. Ir. J. Agric. Res. 9: 1-9.

LYTHGOE, J.N., and H.J.A. DARTNALL. 1970. Deep sea rhodopsin in a mammal. Nature (Lond.) 227: 955-956.

LYUBEZNOV, V.N., and S.S. POPOVA. 1971. Physicochemical and antibacterial properties of different whale fat fractions. Tr. Sarat. Zootekh. Vet. Inst. 21: 202-205.

MACDONALD, M.K. 1981. Increased enzyme activity in rapidly growing northern elephant seal pups, p. 76. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

MACKAY, R.S. 1981. Dolphin interaction with acoustically controlled systems aspects of frequency control learning and nonfood rewards. Cetology 41: 1-12.

MACKINTOSH, N.A. 1973. Distribution of postlarval krill in the Antarctic. Discovery Rep. 36: 95-156.

MACKINTOSH, N.A. 1974. Sizes of krill eaten by whales in the Antarctic. Discovery Rep. 36: 157-178.

MACKINTOSH, N.A., and J.F.G. WHEELER (Appendices by A.J. CLOWES). 1928. Southern blue and fin whales. Discovery Rep. 1: 257-540.

MACLEAN, I. 1968. Correlation of stereoisomerism in present day and geologically ancient isoprenoid fatty acids (mammals, fish, plankton). Nature (Lond.) 218: 1019-1024.

MACNEILL, A.C. 1975. Blood values for some captive cetaceans. Can. Vet. J. 16: 187-193.

MACPHERSON, J.W., and P. PENNER. 1967. Animal identification. 2. Freeze branding of seals for laboratory identification. Can. J. Comp. Med. 31: 275-276.

MAGNIAC, H. 1929. Seals and salmon. Field 154.

MAGOMAEV, A.A. 1966a. Characteristics of the fat composition of the Caspian seal. Rybn. Khoz. 42(5): 62-63. (Fish. Res. Board Can. Transl. Ser. 815, 1967. 4 p.)

MAGOMAEV, A.A. 1966b. The effect of some biological factors on the composition of the fat of the Caspian seal. Rybn. Khoz. 42(10): 71-72. (Fish. Res. Board Can. Transl. Ser. 898, 1967)

MAGOMAEV, A.A. 1970. Temperature difference of the density of Caspian seal oil. Rybn. Khoz. 46(10): 76-78. (Fish. Res. Board Can. Transl. Ser. 1856, 1971. 9 p.)

MAGOMAEV, A.A., and G.N. OLENCHENKO. 1969. Amino acid composition of meat and internal organs of Caspian seal. Sb. Nauch. Soobshch. Teckhnol. Fak. Dagest. Univ. 1: 49-52. (In Russian)

MAGOMAEV, A.A., and G.N. OLENCHENKO. 1971. Level of macro- and microelements in the meat, viscera and blood of Caspian Sea seals. Rybn. Khoz. 47(8): 78-79. (In Russian)

MAGOMAEV, A.A., and A.M. OMAROV. 1975. Acid composition of fats from subcutaneous fat, muscle tissue and liver of the Caspian seal. Izv. Vyssh. Uchebn. Zaved. Pishch. Teckhnol. 1: 31-32. (In Russian)

MAJIMA, Y. 1963. Experimental studies on hypercholesteremia. I. Effects of polyunsaturated fatty acids in whale oil on experimental hypercholesteremia of rats. Eiyo to Shokuryo 16: 289-295.

MAKSIMOV, S.I. 1967. Improving the quality of vitamin A concentrates. Tr. Vses. Nauch.-Issled. Inst. Morsk. Ryb. Khoz. Okeanogr. 63: 145-154. (In Russian)

MALINS, D.C. (ed.) 1977. Effects of petroleum on Arctic and subarctic marine environments and organisms. Vol. 2. Biological effects. Academic Press, New York, NY.

MALINS, D.C., P.A. ROBISCH, and U. VARANASI. 1972. Biosynthesis of triacylglycerols containing isovaleric acid. Biochem. Biophys. Res. Commun. 48: 314-319.

MALINS, D.C., and U. VARANASI. 1972. Isovaleric acid in accoustic tissues of porpoises. Triacylglycerols resistant to porcine pancreatic lipase. Protides Biol. Fluids Proc. Colloq. 19: 127-129, 1971.

MALINS, D.C., and U. VARANASI. 1975. Cetacean biosonar. Part II. The biochemistry of lipids of accoustic tissues, p. 237-290. In D.C. Malins and J.R. Sargent (ed.) Biochemical and biophysical perspectives in marine biology. Vol. 2. Academic Press, London.

MALINS, D.C., and J.C. WEKELL. 1970. The lipid biochemistry of marine organisms. Prog. Chem. Fats Other Lipids 10: 339-363.

MALMBROS, H., and G. WIGAND. 1957. The effect on serum cholesterol of diets containing different fats. Lancet 273: 1-7.

MALVIN, R.L., J.-P. BONJOUR, and S.H. RIDGWAY. 1971. Antidiuretic hormone levels in some cetaceans. Proc. Soc. Exp. Biol. Med. 136: 1203-1205.

MALVIN, R.L., and M. RAYNER. 1968. Renal function and blood chemistry in Cetacea. Am. J. Physiol. 214: 187-191.

MALVIN, R.L., S.H. RIDGWAY, and L. CORNELL. 1978. Renin and aldosterone levels in dolphins and sea lions. Proc. Soc. Exp. Biol. Med. 178: 665-668.

MALVIN, R.L., and A.J. VANDER. 1967. Plasma renin activity in marine teleosts and Cetacea. Am. J. Physiol. 213: 1582-1584.

MANGOLD, H.K., and D.C. MALINS. 1960. Fractionation of fats, oils and waxes on thin layers of silicic acid. J. Am. Oil. Chem. Soc. 37: 383-385.

MAN'KOVSKAYA, I.N. 1975. Myoglobin content and distribution in muscle tissue of Black Sea dolphins. Zh. Evol. Biokhim. Fiziol. 11: 263-267. (In Russian)

MANNING, T.H. 1971. Geographical variation in the polar bear, Ursus maritimus. Can. Wildl. Serv. Rep. Ser. 13: 27 p.

MANSFIELD, A.W. 1956. The male walrus reproductive cycle. In Fish Res. Board Can. Arct. Unit Annu. Rep. Invest. Summ. 8: 10.

MANSFIELD, A.W. 1958. The biology of the Atlantic walrus, Odebenus rosmarus rosmarus (Linnaeus), in the eastern Canadian Arctic. Fish. Res. Board Can. Manuscr. Rep. Ser. (Biol.) 653: 146 p.

MANSFIELD, A.W. 1958a. The breeding behavior and reproductive cycle of the Weddell seal (Leptonychotes weddelli: Lesson). Falkl. Isl. Depend. Surv. Sci. Rep. 18: 1-41.

MANSFIELD, A.W. 1959. The walrus in the Canadian Arctic. Fish. Res. Board Can. Arct. Unit. Circ. 2: 13 p.

MANSFIELD, A.W. 1964. Walrus and narwhal research, p. 47-50. In I.M. Cowan (ed.) Present and future research on marine mammals. Annu. Min. Fish. Res. Board Can. (1964): 29-57.

MANSFIELD, A.W. 1966a. The walrus in Canada's Arctic. Can. Geogr. J. 72: 88-95.

MANSFIELD, A.W. 1966b. Le morse dans l'arctique Canadien. Jeune Sci. 5: 12-19.

MANSFIELD, A.W. 1967. Seals of Arctic and eastern Canada. Bull. Fish. Res. Board Can. 137: 35 p.

MANSFIELD, A.W. 1971. Occurrence of the bowhead or Greenland right whale (Balaena mysticetus) in Canadian Arctic waters. J. Fish. Res. Board Can. 28: 1873-1875.

MANSFIELD, A.W. 1973. The Atlantic walrus, Odobenus rosmarus, in Canada and Greenland. IUCN (Int. Union Conserv. Nat. Nat. Resour.) Pub. New Ser. Suppl. Pap. 39: 69-79.

MANSFIELD, A.W. 1977. Growth and longevity of the grey seal, Halichoerus grypus, in eastern Canada. Int. Counc. Explor. Sea (I.C.E.S.) Mar. Mammal Comm. C.M./1977/N: 6.

MANSFIELD, A.W. 1980. Impact of oil production on marine mammals, p. 334-353. In C. Reed Upton (ed.) Symposium: environmental workshop, Proceedings 9th environmental workshop, Fairmont Hot Springs, BC, May 4-7, 1980. Arcc. Inst. N. Am. Spec. Publ.

MANSFIELD, A.W., and B. BECK. 1977. The grey seal in eastern Canada. Can. Fish. Mar. Serv. Tech. Rep. 704: 81 p.

MANSFIELD, A.W., and D.E. SERGEANT. 1973. Seals as indicators of pollution. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mammal Comm. 1973/E: 25.

MANSFIELD, A.W., T.G. SMITH, and B. BECK. 1975. The narwhal, Monodon monoceros, in eastern Canadian waters. J. Fish. Res. Board Can. 32: 1041-1046.

MANSKI, W., S.P. HALBERT, and T.P. AUERBACH. 1964. Immunochemical analysis of the phylogeny of lens proteins, p. 545-554. In C.A. Leone (ed.) Taxonomic biochemistry and serology. Ronald Press, New York, NY.

MANTON, V.J.A. 1976. The nutrition of dolphins. Int. Zoo Yearb. 16: 46-48.

MARAKOV, S.V. 1963. Experiment of immobilization of fur seals by electric current. Sb. Nauchn. Tekhnol. Inf. Vses. Nauchno-Issled. Inst. Zhivotn. Syr'ya Puskiny 6: 67-69. (In Russian)

MARGNI, R.A., S.E. HAJOS, and M. ROMERO-MERCADO. 1971. Seroproteins, glycoproteins, lipoproteins and immunoglobulins in Antarctic seals (Leptonychotes weddelli). Contrib. Inst. Antarct. Argent. 139.

MARGNI, R.A., S.E. HAJOS, and M.R. MERCADO. 1972. Antarctic seal serum proteins, glycoproteins and lipoproteins. Experientia 29: 862.

MARINE MAMMAL BIOLOGICAL LABORATORY. 1970. Special study: nutrition of pups, p. 23-25. In Fur seal investigations, 1967. U.S. Fish Wildl. Serv. Spec. Sci. Rep. Fish. 597.

MARINI, M.A., and T.T. BLAIR. 1971. Survival of histological structure and biochemical constituents of an ancient mummified Weddell seal. 1. General description of age of Antarctic seal mummies, p. 193-196. In W.H. Burt (ed.) Antarctic Pinnipedia. Antarct. Res. Ser. 18.

MARKS, R.H.L. 1969. Kinetic studies of the renaturation of a series of copper(II)-denatured myoglobins. Ph.D. Thesis, Indiana University. 123 p. (Diss. Abstr. Int. Ser. B. 30: 4954-B, 1970)

MARKS, R.H.L. 1971. Comparison of myoglobins from harbour seal, porpoise and sperm whale. 6. Renaturation of copper(2)-denatured ferrimyoglobins. J. Biol. Chem. 246: 466-474.

MARNOV, D.I., and P.F. KOLOSOVA. 1966. Amino acid composition of some ingredients of combined fodders. Tr. Vses. Nauchn.-Issled. Inst. Zerna Produktov ego Pererabotki 55: 187-193. (In Russian)

MARQUETTE, W.M. 1977. The 1976 catch of bowhead whales (Balaena mysticetus) by Alaskan Eskimos, with a review of the fishery, 1973-1976 and a biological summary of species. Northwest and Alaska Fishery Center Processed Report, National Marine Fisheries Service, Seattle, WA. 96 p.

MARQUETTE, W.M., and H.W. BRAHAM. 1982. Gray whale distribution and catch by Alaskan Eskimos: a replacement for the bowhead whale? Arctic 35: 386-394.

MARTIN, H., W.E. EVANS, and C.A. BOWERS. 1971. Methods for radio tracking marine mammals in the open sea. IEEE Conf. Eng. Ocean Environ. 1971: 44-49.

MARTIN, J.H., P.D. ELLIOTT, V.C. ANDERLINI, D. GIRVIN, S.A. JACOBS, R.W. RISEBOROUGH, R.L. DE LONG, and W.G. GILMARTIN. 1976. Mercury-selenium-bromine imbalance in premature parturient California sea lions. Mar. Biol. (Berl.) 35: 91-104.

MARTINEZ, C., and F. SOUTO. 1980. Hematological and serological studies on Arctocephalus australis (Zimmerman) and Otaria flavescens (Shaw) (Mammalia: Pinnipedia) - methodology and preliminary results. J. Cienc. Nat. Resumenes 1: 97-98.

MARUYAMA, T. 1965a. Whale products as food, p. 251-264. In G. Borgstrom (ed.) Fish as food. Academic Press, New York, NY.

MARUYAMA, T. 1965b. Whale oil, p. 639-643. In G. Borgstrom (ed.) Fish as food. Academic Press, New York, NY.

MATE, B.R., R.F. BROWN, D. AURIOLES, and M. BOUNDS. 1981. Electro-immobilization of seals and sea lions, p. 78. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

MATE, B.R., J.T. HARVEY, L. HOBBS, and R. MAIEFSKI. 1983. A new attachment device for

radio tagging large whales. J. Wildl. Manage. 47: 868-872.

MATHAI, C.K., M.E.Q. PILSON, and E. BEUTLER. 1966. Galactose metabolism in the sea lion. Proc. Soc. Exp. Biol. Med. 123: 603-604.

MATHISEN, O.A., R.T. BAADE, and R.J. LOPP. 1962. Breeding habits, growth and stomach contents of the Steller sea lion in Alaska. J. Mammal. 43: 469-477.

MATSKO, S.N., and D. VITALI. 1930. Vitamin D content in oils of marine mammals and fishes. Biull. Rybn. Khoz. 11/12: 35-36. (In Russian)

MATSUI, M., C. SHIMIZU, and F. MATSUURA. 1975a. Metmyoglobin reducing enzyme systems in the muscle of blue white dolpin. I. Purification and properties of diaphorase. Bull. Jpn. Soc. Sci. Fish. 41: 761-769.

MATSUI, M., C. SHIMIZU, and F. MATSUURA. 1975b. Metmyoglobin reducing enzyme systems in the muscle of blue white dolphin. II. Purification and some physicochemical properties of ferrimyoglobin reductase. Bull. Jpn. Soc. Sci. Fish. 41: 771-777.

MATSUMOTO, J. 1972. ATPase activating substance from marine mammalian muscle hydrolyzate. Japan Kokai 72 29, 591 (Cl. 36(2) D 9), 06 Nov. 1972, Appl. 71 18, 806, 31 Mar. 1971: 4 p.

MATSUMOTO, J. 1980. Dentrifices containing ATPase activating polypeptides. Jpn. Tokyo Koho 80 42, 965 (Cl. A 61K7/28), 04 Nov. 1980, Appl. 71/55, 205, 25 Jul. 1971: 3 p.

MATSUMOTO, J.J., T. SUZUKI, Y. ASAKA, N. TAMAKI, H. MINAGUCHI, S. UTSUGI, and T. TAMIYA. 1976. Stimulating effect of fur seal muscle hydrolysate peptides on the contractile activity of actomyosin. Bull. Jpn. Soc. Sci. Fish. 42: 1033-1040.

MATSUMURA, Y. 1950-51. Biochemical studies of dietary fats. II. The effect of continued intake of whale oil on the human body. J. Jpn. Soc. Food Nutr. 3: 173-174.

MATSUNO, M. 1964. Whale heparin and its anticoagulants and lipemia-clearing activities. Folia Pharmacol. Jpn. 60: 507-515.

MATSUNO, M., and K. HASHIMOTO. 1964. Assay of anticoagulant unit of ω-heparin, newly isolated from whale and intestine, and its toxicity. Tohoku J. Exp. Med. 83: 143-145.

MATSUOKA, Y., and A. KOIDE. 1966. Fin whale chymotrypsin. Arch. Biochem. Physiol. 114: 422-424.

MATSUURA, D.T. 1972. Temperature regulation in the California sea lion (Zalophus californianus). Ph.D. Thesis, University of Hawaii, Honolulu, HI.

MATSUURA, D.T., and G.C. WHITTOW. 1973. Oxygen uptake of the California sea lion and harbour seal during exposure to heat. Am. J. Physiol. 225: 711-715.

MATSUURA, D.T., and G.C. WHITTOW. 1975. Thermal insulation of the California sea lion during exposure to heat. Comp. Biochem. Physiol. 51A: 757-758.

MATSUURA, F., T. KOGURE, and G. FUKUI. 1952. Methionine contents of muscle proteins of various aquatic animals. Bull. Jpn. Soc. Sci. Fish. 17: 354-362.

MATTHEWS, L.H. 1932. Lobster-krill: anomuran Crustacea that are the food of whales. Discovery Rep. 5: 467-484.

MATTHEWS, L.H. 1950a. Process of lactation in grey seal during September and October. Proc. Zool. Soc. Lond. 120: 763.

MATTHEWS, L.H. 1950b. The natural history of the grey seal, including lactation. Proc. Zool. Soc. Lond. 120: 763.

MATTHEWS, L.H. 1958. The biology of whales. New Sci. 4 December: 1426-1427.

MATTHEWS, L.H., and R.J. HARRISON. 1949. Subsurface crypts, oogenesis, and the corpus luteum in the ovaries of seals. Nature (Lond.) 164: 587-588.

MATTSON, J.L., and R.L. SEELEY. 1974. Simple clinical temperature telemetry system for pinnipeds. J. Wildl. Dis. 10: 267-271.

MAWDESLEY-THOMAS, L.E. 1973. A bibliography of some diseases of marine mammals. Vet. Bull. (Lond.) 43: 657-664.

MAWDESLEY-THOMAS, L.E. 1974. Some aspects of neoplasia in marine animals. Adv. Mar. Biol. 12: 151-231.

MAWDESLEY-THOMAS, L.E., and W.N. BONNER. 1970. Uterine tumors in a grey seal (Halichoerus grypus). J. Pathol. 103: 205-208.

MAYFIELD, H.L., R.R. ROEHM, and A.F. BEECKLER. 1955. Riboflavine and thiamine content of eggs from New Hampshire and white leghorns fed diets containing condensed fish or dried whale solubles. Poult. Sci. 34: 1106-1111.

MAYR, E. 1963. Animal species and evolution. Harvard University Press, Cambridge, MA.

MAYZAUD, P., and R.G. ACKMAN. 1978. The 6,9, 12,15,18-heneicosapentaenoic acid of seal oil. Lipids 13: 24-28.

McALISTER, B. 1981. Heat loss and energy consumption in marine mammals, p. 79. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

McALISTER, W.B., and G.A. SANGER. 1975. Preliminary estimates of pinniped-finfish relationship in the Bering Sea. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on the biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

McCANN, T.S. 1983. Activity budgets of southern elephant seals, Mirounga leonina, during the breeding season. Z. Tierpsychol. 61: 111-126.

McCLENEGHAN, K., and J.A. AMES. 1976. A unique method of prey capture by a sea otter, Enhydra lutris. J. Mammal. 57: 410-417.

McCONNAUGHEY, T., and C.P. McROY. 1979. Food-web structure and the fractionation of carbon isotopes in the Bering Sea. Mar. Biol. (Berl.) 53: 257-262.

McCORMICK, J.G. 1969. Relationship of sleep, respiration and anaesthesia in the porpoise: a preliminary report. Proc. Natl Acad. Sci. USA 62: 697-703.

McDERMID, E.M., R. ANANTHAKRISHNAN, and N.S. AGAR. 1972. Electrophoretic investigation of plasma and red cell proteins and enzymes of McQuarie Island elephant seals. Anim. Blood Groups Biochem. Genet. 3: 85-94.

McDERMID, E.M., and W.N. BONNER. 1975. Red cell and serum protein systems of grey seals and harbour seals. Comp. Biochem. Physiol. 50B: 97-101.

McDONALD, M.W. 1953. Condensed whale solubles. An efficient replacement for meat-meal in chicken rations. Agric. Gaz. N. S. W. 64: 303-304; 324-325.

McDONALD, M.W., and G.L. McCLYMONT. 1954. Studies on the nutrition of poultry. 4. Nutritional value of condensed whale solubles in chicken rations. Aust. Vet. J. 30: 57-60.

McDONALD, R.M. 1914. Bibliography of fur seals and other life. U.S. Bur. Fish. Bull. 34: 149-167.

McDONELL, N. 1971. Physiological and pharmacological consideration in pinniped anesthesia. In Symposium: International Association for Aquatic Animal Medicine, April 28-30, 1971. University of Guelph, Guelph, ON.

McDONELL, W. 1972. Anesthesia of the harp seal. J. Wildl. Dis. 8: 287-295.

McGINNIS, S.M. 1975. Peripheral heat exchange in phocids. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 481-486.

McGINNIS, S.M., E.F. CRYER, and R.C. HUBBARD. 1970. Peripheral heat dissipation in pinnipeds, p. 159-168. In Symposium: biological sonar and diving mammals. Proceedings of the 7th annual conference on biological sonar and diving mammals, 23-24 October 1970. Stanford Research Institute, Biological Sonar Laboratory, Menlo Park, CA.

McGINNIS, S.M., M. HEATH, and D. ALCORN. 1975. Thermoregulation in nursing and weaned northern elephant seal pups, p. 22. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on the biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

McGINNIS, S.M., and T.P. SOUTHWORTH. 1967. Body temperature fluctuations in the northern elephant seal. J. Mammal. 48: 484-485.

McGINNIS, S.M., and T.P. SOUTHWORTH. 1968. Body temperature regulation in the northern elephant seal. Univ. Calif. Santa Cruz, Ano Nuevo Rep. 2: 62-67.

McGINNIS, S.M., and T.P. SOUTHWORTH. 1971. Thermoregulation in northern elephant seal, Mirounga angustirostris. Comp. Biochem. Physiol. 40: 893-898.

McGRATH, C.J., D.D. FEENEY, A. CRIMI, and J. RUFF. 1981. Upper airway of the California sea lion: an anesthetist's perspective. Vet. Med. Small Anim. Clin. 76: 548-549.

McHUGH, J.L. 1952. Fur seals preying on black-footed albatross. J. Wildl. Manage. 16: 226.

McKAY, R.S. 1970. Biomedical telemetry. Wiley, New York, NY.

McKIE, J.C., I.M. DAVIES, and G. TOPPING. 1980. Heavy metals in grey seals (Halichoerus grypus) from the east coast of Scotland. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1980/E:41.

McLAREN, I.A. 1955a. Feeding in the ringed seal. Fish. Res. Board Can. Arct. Unit Annu. Rep. 1955: 31-32.

McLAREN, I.A. 1955b. Reproduction in the ringed seal. Fish. Res. Board Can. Arct. Unit Annu. Rep. 1955: 32-34.

McLAREN, I.A. 1955c. Aging ringed seals. Fish. Res. Board Can. Arct. Unit Annu. Rep. 1955: 31.

McLAREN, I.A. 1957. Products of Arctic seal carcasses and loss of seals. Fish. Res. Board Can. Arct. Unit Annu. Rep. 1957: Invest. Summ. No. 16.

McLAREN, I.A. 1958a. The biology of the ringed seal (Phoca hispida Schreber) in the eastern Canadian Arctic. Bull. Fish. Res. Board Can. 118: 1-97.

McLAREN, I.A. 1958b. Some aspects of growth and reproduction of the bearded seal,

Erignathus barbatus (Erxleben). J. Fish. Res. Board Can. 15: 219227.

McLAREN, I.A. 1962. Population dynamics and exploitation of seals in the eastern Canadian Arctic, p. 168-183. In E.D. Le Cren and M.W. Holdgate (ed.) The exploitation of natural animal populations. Backwell Scientific, Oxford.

McLAREN, I.A. 1966. Taxonomy of harbour seals of the western north Pacific and evolution of certain other hair seals. J. Mammal. 47: 466-473.

McLAREN, I.A., and A.W. MANSFIELD. 1960. The netting of sea mammals. A report on the Belcher Island experiment. Fish. Res. Board Can. Arct. Biol. Stn Circ. 6: 13 p.

McLENDON, G. 1977. A correlation between myoglobin thermodynamic stabilities and species metabolic rates. Biochem. Biophys. Res. Commun. 77: 959-966.

McMILLIN, J.M., U.S. SEAL, L. ROGERS, and A.W. ERICKSON. 1976. Annual testosterone rhythm in the black bear (Ursus americanus). Biol. Reprod. 15: 163-167.

McTAGGART, S.A. 1972. Gross embryological development and fetal growth of the harbour seal, Phoca vitulina richardi. B.Sc. Thesis, University of British Columbia, Vancouver, BC.

McWILLIAM, P.S. 1977. Further studies of plankton ecosystem in the eastern Indian Ocean. VI. Ecology of the Euphausiacea. Aust. J. Mar. Freshwater Res. 28: 627-644.

MEAD, G.W. 1953. The food habits of the north Pacific fur seal in Japanese waters, with a study of the fishes found in the feeding groups. Ph.D. Thesis, Stanford University. (Diss. Abstr. 13: 922, 1953)

MEARA, M.L. 1952. The component acids of the milk fat of a grey Atlantic seal. Biochem. J. 51: 190-193.

MEDNIKOV, B.M., and E.A. SHUBINA. 1976. Role of transcription promoter sites in microevolutionary processes. Dokl. Akad. Nauk SSSR 229: 1237-1239. (In Russian)

MEDVEDEV, L.P. 1971. Data on the feeding of the white whale in the Dickson region. Tr. Atl. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 39: 60-66. (In Russian) (Can. Fish. Mar. Serv. Transl. Ser. 3185, 1974: 92-104)

MEDWAY, W. 1974. Some coagulation factors in plasma from a California gray whale, Echrichtius robustus. Mar. Fish. Rev. 36(4): 24-25.

MEDWAY, W. 1979. Bisalbuminemia in a bottlenosed dolphin (Tursiops truncatus). Experientia 35: 1158-1159.

MEDWAY, W. 1983. Evaluation of the safety and usefulness of techniques to obtain biopsies from free-swimming cetaceans. U.S. Government Printing Office, Washington, D.C. (#PB83-263269)

MEDWAY, W., and J.R. GERACI. 1964. Hematology of the bottle-nose dolphin, Tursiops truncatus. Am. J. Physiol. 207: 1367-1370.

MEDWAY, W., and J.R. GERACI. 1965. Blood chemistry of the bottle-nosed dolphin, (Tursiops truncatus). Am. J. Physiol. 209: 169-172.

MEDWAY, W., and J.R. GERACI. 1972a. Simulated field blood studies in the bottle-nosed dolphin, Tursiops truncatus. I. Leukocyte distribution between the blood of capillaries and large vessels. J. Wildl. Dis. 8: 239-241.

MEDWAY, W., and J.R. GERACI. 1972b. Distribution of glucose in the bottle-nosed dolphin, Tursiops truncatus. Am. J. Vet. Res. 33: 1545-1546.

MEDWAY, W., and J.R. GERACI. 1978. Clinical pathology of marine mammals, p. 604-610. In M.E. Fowler (ed.) Zoo and wild animal medicine. W.B. Saunders, Toronto, ON.

MEDWAY, W., J.R. GERACI, and L.V. KLEIN. 1970a. Hematologic response to administration of a corticosteroid in the bottlenosed dolphin, (Tursiops truncatus). J. Am. Vet. Med. Assoc. 157: 563-565.

MEDWAY, W., J.G. McCORMICK, S.H. RIDGWAY, and J.F. CRUMP. 1970b. Effects of prolonged halothane anesthesia on some cetaceans. J. Am. Vet. Med. Assoc. 157: 576-582.

MEDWAY, W., and F. MOLDOVAN. 1966. Blood studies in the north Atlantic pilot whale, Globicephala malaena. Physiol. Zool. 39: 110-116.

MEDWAY, W., H.F. SCHRYVER, and B. BELL. 1966. Clinical jaundice in a dolphin. J. Am. Vet. Med. Assoc. 149: 891-895.

MERCER, M.C. 1973. Observations on distribution and intraspecific variation in pigmentation patterns of odontocete Cetacea in the western north Atlantic. J. Fish. Res. Board Can. 30: 1111-1130.

MERCER, M.C. 1975. Modified Leslie de Lury population models of the long-finned pilot whale, Globicephala malaena, and annual production of the short-finned squid, Illex illecebrosus, based upon their interaction at Newfoundland, Canada. J. Fish. Res. Board Can. 38: 1145-1154.

MERDSØY, B., J. LIEN, and A. STOREY. 1979. A narwhal, Monodon monoceros, new-record in Halls Bay, Newfoundland, Canada. Can. Field-Nat. 93: 303-304.

MERMOZ, J.F. 1977. On the stranding of a bottle-nosed dolphin, Tursiops truncatus, in the mouth of the La Plata River, Buenos Aires, Argentina. Physis. Secc. C. Cont. Org. Terr. 37: 227-235.

MERMOZ, J.F. 1980. Preliminary report on the southern right whale in the southwestern Atlantic. Int. Whaling Comm. Rep. Comm. 30: 183-186.

MERINO, A.S. 1953. Composition and food value of whale meat. Anales Bromatol. 5: 5-9.

MERINO, A.S. 1954. The composition and nutritive value of whale meat. 10th Congress intern. inds. agr. y aliment., Madrid 349-353. (In Spanish, English summary)

MESHCHERSKII, R.M., N.V. MENYAILOV, I.S. IVANOV, and I.I. KORENEV. 1980. Anesthesia of the newborn seal, Phoca groenlandica. Zh. Evol. Biokhim. Fiziol. 16: 92-93. (In Russian)

MESHCHERSKII, R.M., N.V. MENYAILOV, I.S. SHEPELEVA, I.I. KORENEV, YU.A. TOPOROV, I.A. GORELOV, and I.S. IVANOV. 1978. Anesthesization of porpoises without blocking their own respiratory capacity. Zh. Evol. Biokhim. Fiziol. 14: 410-411. (In Russian)

MESSELT, E.B., and A.S. BLIX. 1973. Salivary glands of the ringed seal. Comp. Biochem. Physiol. 46A: 1-4.

MEUTH, J.L. 1982. Sequence determination of the major component myoglobins of the Dall porpoise, (Phocoenoides dalli dalli), the common porpoise, (Phocoena phocoena), and the killer whale, (Orcinus orca), and carboxyl terminal sequence studies. Ph.D. Thesis, Indiana University. 254 p. (Diss. Abstr. Int. Ser. B. 42(12, Pt. 1): 4774, 1982) (University Microfilms, Order No. 82-11161)

MEUTH, J.L., B.N. JONES, and F.R.N. GURD. 1981. Coordination complexes and catalytic properties of proteins and related substances. 114. Reassignment of residue 122 in the myoglobin from the killer whale, Orcinus orca. J. Mol. Evol. 17: 163-166.

MIKELADZE, D.A. 1971. Keeping of fur seals and Caspian seals in the Batumi aquarium. Tr. Atl. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 39: 273-279. (In Russian)

MILLARD, R.W., J.K. KJEKSHUS, A.S. BLIX, D. FRANKLIN, and R.W. ELSNER. 1980. Coronary vasoconstriction in diving seals: a natural model of vasospasm (Abstract). Fed. Proc. 39: 691.

MILLER, D. 1974. A review of the taxonomic status, life history and some ecological interactions of the sea otter, Enhydra lutris. Calif. Dep. Fish Game Leafl. 7: 13 p.

MILLER, E.L., and K.J. CARPENTER. 1964. Availability of sulfur amino acids in protein foods. I. Total sulfur amino acid content in relation to sulfur and nitrogen balance studies with the rat. J. Sci. Food Agr. 15: 810-820.

MILLER, E.L., K.J. CARPENTER, C.B. MORGAN, and A.W. BOYNE. 1965. Availability of sulfur amino acid in protein foods. II. Assessment of available methionine by chick and microbiological assays. Br. J. Nutr. 19: 249-267.

MILLER, K. 1978. Energetics of the northern fur seal in relation to climate and food resources of the Bering Sea. Marine Mammal Comm. Final Rep. 60: 21 p.

MILLER, K., and L. IRVING. 1975. Metabolism and temperature regulation in young harbor seals, Phoca vitulina richardii. Am. J. Physiol. 229: 506-511.

MILLER, K., M. ROSENMANN, L. IRVING, and P. MORRISON. 1972. Metabolism and temperature regulation in new born and developing harbour seals (Abstract). Fed. Proc. 32: 391.

MILLER, L.K. 1978a. Energetics of the northern fur seal in relation to climate and food resources of the Bering Sea. Marine Mammal Comm. Final Rep. Contract No. MM5AC025: 27 p.

MILLER, L.K., M. ROSENMANN, and P. MORRISON. 1976. Oxygen uptake and temperature regulation of young harbor seals (Phoca vitulina richardii) in water. Comp. Biochem. Physiol. 54A: 105-107.

MILLER, R.M., and S.H. RIDGWAY. 1963. Clinical experience with dolphins and whales. Small Animal Clinician 3: 189- .

MILLS, G.L., and C.E. TAYLAUR. 1971. The distribution and composition of serum lipoproteins in eighteen animals. Comp. Biochem. Physiol. 40B: 489-501.

MILNE, F.N.J. 1955. Condensed whale solubles in chick-starter rations. Queensl. J. Agric. Sci. 12: 21-31.

MIMS, M.P., J.S. OLSON, I.M. RUSSU, S. MIURA, T.E. CEDE, and C. HO. 1983. Proton NMR studies of isonitrile heme protein complexes. J. Biol. Chem. 258: 6125-6134.

MINATO, A. 1949. Constituents of body oil from marine animals. Yakugaku Zasshi 69: 348-351.

MINATO, A., and N. IKEDA. 1949. Constituents of bile from marine animals. Yakugaku Zasshi 69: 345-348.

MIRONOVA, T.N. 1951. Content of vitamin A in commercial fish of Enisei River and in the fat of Delphinapterus leucas. Akad. Nauk SSSR Inst. Biokhim. im. A.N. Bukha, Vitaminnye Resursy i Ispol'zovanie Sbornik 1: 222-232. (Chem. Abstr. 47: 5630d, 1953) (In Russian)

MISHIMA, M., N. YAMAGATA, and T. TORII. 1977. Concentrations of trace metals in tissues of several animals around Syowa Station. Antarct. Rec. 58: 145-153.

MITCHELL, E. 1972. Whale pigmentation and feeding behavior. Am. Zool. 12: 655.

MITCHELL, E. 1972a. Assessment of northwest Atlantic finwhale stocks. Int. Whaling Comm. Rep. Comm. 22: 111-118.

MITCHELL, E. 1975. Trophic relationships and competition for food in northwest Atlantic whales. Can. Soc. Zool. Proc. Annu. Meeting, 1975: 123-133.

MITCHELL, E.D. 1973. The status of the world's whales. Nat. Can. (Ottawa) 2: 9-25.

MIYAGAWA, S., and K. UENO. 1958. B vitamins content of liver meal and liver extracts of aquatic animals. Bull. Jpn. Soc. Sci. Fish. 24: 296-299.

MIYAUCHI, D.T., and F.B. SANFORD. 1947. Vitamin A content of fur seal oils. Commer. Fish. Rev. 9(11): 5-8.

MIYAZAKI, N. 1977. Growth and reproduction of Stenella coeruleoalba off the Pacific coast of Japan. Sci. Rep. Whales Res. Inst. Tokyo 29: 21-48.

MIYAZAKI, T., Y. OCHI, T. HACHIYA, K. SHIOMI, and M. YOSHIMURA. 1974. TSH content of whale posterior pituitary gland. Horumon To Rinsho 22: 287-289. (In Japanese)

MIZE, C.E., J. AVIGAN, J.H. BAXTER, H.M. FALES, and D. STEINBERG. 1966. Metabolism of phytol-U-C-14 and phytanic acid-U-C-14 in the rat. J. Lipid Res. 7: 692-697.

MIZUE, K. 1951. Food of whales in the adjacent waters of Japan. Sci. Rep. Whales Res, Inst. Tokyo 5: 81-90.

MOHINDRA, V.K., and A. DOWNS. 1966. Cesium-137 activity in seal samples. Data Radiat. Prot. Prog. 4(2).

MØHL, B. 1980. Marine mammals and noise. Arctic Seas Bulletin (Canadian Arctic Resources Committee, Ottawa) 2: 1-2.

MOLLER, D., G. NAEVDAL, and A. VALEN. 1966. Rapport om arbeidet med blodanalyser for populasjonsundersokelser. Fiskeridir. Havforsk. 2: 1-17.

MOMOSHIMA, N., Y. TAKASHIMA, and Y. NAKAYAMA. 1981. Stable- and radionuclide concentration in organs of a dolphin. Radiosotopes 30: 449-451.

MONTAGNA, W., and R.J. HARRISON. 1957. Specialization in the skin of the seal (Phoca vitulina). Am. J. Anat. 100: 81-113.

MOORE, P.G. 1977. Inorganic particulate suspensions in the sea and their effects on marine animals. Oceanogr. Mar. Biol. Annu. Rev. 15: 225-363.

MOORS, P.J. 1980. Sexual dimorphism in the body size of mustelids Carnivora. The roles of food habits and breeding systems. Oikos 34: 147-158.

MOREJOHN, G.V. 1973. The natural history of Dall's porpoise in the north Pacific Ocean, p. 45-83. In H.E. Winn and B.L. Olla (ed.) Behaviour of marine animals: current perspectives in research, Vol. 3. Cetaceans. Plenum, New York, NY.

MORI, M., Y. IWAKIRI, A. OZAWA, and S. SHIBATA. 1964. Analysis of fatty acid and fatty alcohol composition of sperm whale oil by gas-liquid chromatography. Bull. Jpn. Soc. Sci. Fish. 30: 161-169.

MORI, M., Y. IWAKIRI, A. OZAWA, and S. SHIBATA. 1966a. Analysis of fats and oils by gas-liquid chromatography. III. Fatty acid and fatty alcohol composition of sperm whale oil. 1. Nippon Suisan Kabushiki Kaisha Chuo Kenkyusho Hokoku 10: 81-87.

MORI, M., Y. IWAKIRI, and S. SHIBATA. 1966b. Analysis of fats and oils by gas-liquid chromatography. V. Fatty acids and fatty alcohols prepared in both the factory and the laboratory from sperm whale oil. Nippon Suisan Kabushiki Kaisha Chuo Kenkyusho Hokoku 10: 95-99.

MORI, M., A. OZAWA, Y. IWAKIRI, and S. SHIBATA 1966c. Analysis of fats and oils by gas-liquid chromatography. VII. Fatty acid compositions of waxes and glycerides from sperm whale oil. 1. Partial methanolysis. Nippon Suisan Kabushiki Kaisha Chuo Kenkyusho Hokoku 10: 104-109.

MORI, M., A. OZAWA, and S. SHIBATA. 1966d. Analysis of fats and oils by gasliquid chromatography. IV. Fatty acid and fatty alcohol composition of sperm whale oil. 2. Nippon Suisan Kabushiki Kaisha Chuo Kenkyusho Hokoku 10: 88-94.

MORI, M., A. OZAWA, and Y. WATANABE. 1966e. Analysis of fats and oils by gas-liquid chromatography. VI. Fatty acid and alcohol composition of head cavity oil and suika oil from sperm whale. Nippon Suisan Kabushiki Kaisha Chuo Kenkyusho Kokoku 10: 100-103.

MORI, M., T. SAITO, and Y. WATANABE. 1965a. Fatty acid compositions of waxes and glycerides. Bull. Jpn. Soc. Sci. Fish. 31: 448-451.

MORI, M., T. SAITO, and Y. WATANABE. 1966f. Analysis of fats and oils by gas-liquid chromatography. VIII. Fatty acid compositions of waxes and glycerides from sperm whale oil. 2. Column chromatography. Nippon Suisan Kabushiki Kaisha Chuo Kinkyusho Hokoku 10: 110-114.

MORI, M., T. SAITO, and Y. WATANABE. 1966g. Analysis of fats and oils by gas-liquid chromatography. IX. The blubber oil of the southern elephant seal, Mirounga leonina. Nippon Suisan Kabushiki Kaisha Chuo Kenkyusho Hokoku 10: 115-117.

MORI, M., T. SAITO, Y. WATANABE, and Y. NAKANISHI. 1965b. Composition of lipids in the head cavity, blubber and meat of the

sperm whale. Bull. Jpn. Soc. Sci. Fish. 31: 638-643.

MORI, T., and S. ASAKAWA. 1941. Effect of cold storage upon the vitamin A content of whale liver. Nippon Nogeikagaku Kaisni 17: 529-534.

MORII, H. 1973. Production of free volatile fatty acids by microorganisms isolated from stomachs of marine little-toothed whales. I. Free volatile fatty acid composition in culture solutions from glucose-peptone media. Nagasaki Daigaku Suisangakubu Kenkyu Hokoku 35: 85-90.

MORII, H. 1974a. Fatty acids of various lipids in the dolphin. J. Am. Oil Chem. Soc. 51: 515A.

MORII, H. 1974b. Fatty acid composition of microorganisms isolated from the stomach of marine little-toothed whales. Bull. Jpn. Soc. Sci. Fish. 40: 275-283.

MORII, H. 1979a. The production of free volatile fatty acids by microorganisms isolated from the stomach of marine little-toothed whale. II. Changes with environmental conditions for growth of free volatile fatty acids produced from peptone-glucose medium. Nagasaki Daigaku Suisangakubu Kenkyu Hokoku 47: 43-48.

MORII, H. 1979b. The production of short- and long-chain branched fatty acids from fish- and squid-extract media by Vibrio sp. isolated from the stomach of marine little-toothed whales. Nagasaki Daigaku Suisangakubu Kenkyu Hokoku 47: 49-54.

MORII, H. 1979c. The viable counts of microorganisms, pH values, amino acid contents, ammonia contents and volatile fatty acid contents in the stomach fluid of marine little-toothed whales. Nagasaki Daigaku Suisangakuba Kenkyu Hokoku 47: 55-60.

MORII, H. 1979d. Long-chain branched fatty acids in the stomach contents of marine little-toothed whales. Nagasaki Daigaku Suisangakubu Kenkyu Hokoku 47: 61-65.

MORII, H. 1980. Distribution of branched-chain fatty acids in tissues and organs of adult, nursling and fetus of marine little-toothed whale, Stenella coeruleoalba. Nagasaki Daigaku Suisangakuba Kenkyu Hokoku 49: 35-92.

MORII, H. 1981. Fatty acids in blood of marine little-toothed whales, Stenella coeruleoalba. Bull. Jpn. Soc. Sci. Fish. 47: 921-928.

MORII, H. 1982a. Fatty acids in milk of marine little-toothed whales, Stenella attenuata. Bull. Jpn. Soc. Sci. Fish. 47: 1367-1370.

MORII, H. 1982b. Fatty acids and fatty alcohols of triglycerides and wax esters in subcutaneous tissues of marine toothed whales, Stenella coeruleoalba. Bull. Jpn. Soc. Sci. Fish. 48: 227-235.

MORII, H., and R. KANAZU. 1972. Fatty acids in the foetus, nurseling and adult of a kind of dolphin, Stenella attenuata. Bull. Jpn. Soc. Sci. Fish. 38: 599-605.

MORII, H., and T. KANEDA. 1982. Biosynthesis of branched-chain fatty acids from branched-chain amino acids in subcutaneous tissue of marine littletoothed whale, Stenella coeruleo-alba. Comp. Biochem. Physiol. 71B: 357-365.

MORII, T., H. FUJII, and M. MORI. 1954. Sperm whale oil. II. Saponification of sperm whale oil. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 6: 30-35.

MORISHIMA, I., and M. HARA. 1983. High pressure NMR studies of hemoproteins pressure induced structural changes in the heme environments of ferric low spin metmyoglobin complexes. Biochemistry 22: 4102-4107.

MORRIS, R., D.V. ELLIS, and B.P. EMERSON. 1981. The British Columbia, Canada, transplant of sea otter, Enhydra lutris. Biol. Conserv. 20: 291-296.

MORRIS, R.J. 1973. Lipid structure of the spermaceti organ of the sperm whale (Physeter catodon). Deep-Sea Res. 20: 911-916.

MORRIS, R.J. 1975. Lipid structure of the spermaceti organ of the sperm whale (Physeter catodon). Deep-Sea Res. 22: 483-489.

MORRISON, P., M. ROSENMANN, and J. ESTES. 1974. Metabolism and thermoregulation in the sea otter. Physiol. Zool. 47: 218-229.

MORSHTYN, M.I. 1963a. Some physical properties of oil from the Greenland seal fats. Rybn. Khoz. 1963(12): 63-64. (In Russian)

MORSHTYN, M.I. 1963b. Technology of oil production from fat of the Greenland seal. Vses. Nauchno-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr. Nauchno. Tekh. Inf. 6. (In Russian)

MORSHTYN, M.I. 1967. Technological characteristics of harp and hooded seals. Mater. Rybokhoz. Issled. Sev. Baseina, (Murmansk) 9: 151-158.

MORSHTYN, M.I. 1969. Technological characteristics of the Greenland seal and technology of its fat production, p. 66-74. In V.A. Arseniev, B.A. Zenkovitch and K.K. Chaptskii (ed.) Morkie mlekopitayushchie (3rd All-Union Conf. Study Mar. Mamm., Vladivostok, 1966.) Nauka, Moscow. (In Russian)

MORSHTYN, M.I. 1973. Some data on changes in the thickness and fat content of subcutaneous blubber in harp seals. Rybn. Khoz.

49(8): 13-15. (Israel Program Sci. Transl. 1974)

MORTELSMAN, J. 1971. Anaesthesia of wild animals. Ann. Med. Vet. 115: 317-332.

MORTON, R.A., and A.L. STUBBS. 1946. Vitamin A in whale liver oil. Biochem. J. 40: lviii.

MOTAVKINA, N.S., A.A. KONDRAT'EV, R.N. DIGO, B.M. KOVALEV, and V.B. TURKUTYUKOV. 1977. Isolation of complement from whale blood. U.S.S.R. Patent 686,732 (Cl. A61K35/14), 25 Sept. 1979, Appl. 2, 483, 754,05 May 1977.

MOUGIN, J.-L., and J. PREVOST. 1980. Seasonal variations in numbers and biomasses of Antarctic birds. Terre Vie 34: 101-134.

MROCHKOV, K.A. 1951. Vitamin A content of liver of whales of the Antarctic. Rybn. Khoz. 27(3): 54-55. (In Russian)

MROCHKOV, K.A., and L.S. BAIDALINOVA. 1974. Chemical composition and food value of meat of baleen whales. Rybn. Khoz. 1974(5): 65-67. (In Russian)

MROCHKOV, K.A., and V.I. KISELEV. 1972. Chemical composition of parts of the body of an Antarctic sperm whale. Rybn. Khoz. 1972(3): 67-70. (In Russian)

MROSOVSKY, N. 1981. Body fat during pregnancy and lactation, p. 253-258. In L.A. Cioffi, W.P.T. James and T.B. Van Itallie (ed.) The body weight regulatory system: normal and disturbed mechanisms. Raven Press, New York, NY.

MUKAI, I. 1950. A study on pigment of whale oil. 2. The extraction of pigment. I. The extraction by sodium hydroxide. Bull. Jpn. Soc. Sci. Fish. 16: 151-154.

MUKAI, I. 1954. The pigments of whale oil. IV. Fractionation of the pigments. Bull. Jpn. Soc. Sci. Fish. 20: 136-139.

MUKHAMETOV, L.M., A. YA. SUPIN, and I.G. POLYAKOVA. 1982. Electroencephalographic investigation of sleep in Caspian seals, Phoca caspica. Dokl. Biol. Sci. (Engl. Transl. Dokl. Akad. Nauk. SSSR) 26: 508-511.

MULLER-WILLE, L.L. 1974. How effective is oil pollution legislation in Arctic waters? An example from Repulse Bay, Naujaa, N.W.T. Musk-Ox 14: 56-57.

MURCHISON, A.E. 1980. Detection range and range resolution of echolocating bottlenose porpoise (Tursiops truncatus), p. 43-70. In R.G. Busnel and J.F. Fish (ed.) Animal sonar systems. Plenum Press, New York, NY.

MURDAUGH, H.V., Jr, and J.E. JACKSON. 1962. Heart rate and blood lactic acid concentration during experimental diving of water snakes. Am. J. Physiol. 202: 1163-1165.

MURDAUGH, H.V., Jr, W.L. MITCHELL, and J.C. SEABURY. 1961a. Volume receptors and post-prandial diuresis in the seal (Phoca vitulina L.). Proc. Soc. Exp. Biol. Med. 108: 16-18.

MURDAUGH, H.V., Jr, E.D. ROBIN, B.S. PACKER, J.M. LINTA, and C.E. CROSS. 1967. Cation transport in the erythrocyte of the harbour seal, (Phoca vitulina). Bull. Mt Desert Isl. Biol. Lab. 7: 33-34.

MURDAUGH, H.V., Jr, B. SCHMIDT-NIELSEN, J.W. WOOD, and W.L. MITCHELL. 1961b. Cessation of renal function during diving in the trained seal (Phoca vitulina). J. Cell. Comp. Physiol. 58: 261-265.

MURDAUGH, H.V., Jr, J. SMITH, and E.D. ROBIN. 1968. APT-2,3-diphosphoglyceric acid ratios in seal erythrocytes. Bull. Mt Desert Isl. Biol. Lab. 8: 45-46.

MURPHY, B.J., and P.W. HOCHACHKA. 1979. Metabolic studies of Weddell adult and fetus during diving. Fed. Proc. 38(3 Part 1): 1047A.

MURPHY, B.J., and P.W. HOCHACHKA. 1979a. The metabolic activity of heart, lung and brain in the Weddell seal during simulated diving, p.42. In Symposium: biology of marine mammals. Abstracts. Presentations at the 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

MURPHY, B.J., and P.W. HOCHACHKA. 1981. Activities of oxidative and glycolytic enzymes in fetal heart, lung, and brain in the Weddell seal. Can. J. Zool. 59: 1172-1175.

MURPHY, B.J., and P.W. HOCHACHKA. 1981a. Free amino acid profiles in blood during diving and recovery in the Antarctic Weddell seal. Can. J. Zool. 59: 455-477.

MURPHY, B.J., P.W. HOCHACHKA, W.M. ZAPOL, and C.C. LIGGINS. 1982. Free amino acids in the blood of fetal and maternal Weddell seals, Leptonychotes weddelli. Am. J. Physiol. 242: R85-R88.

MURPHY, B.J., W.M. ZAPOL, and P.W. HOCHACHKA. 1980. Metabolic activities of heart, lung and brain during diving and recovery in the Weddell seal. J. Appl. Physiol. Respir. Environ. Exercise Physiol. 48: 596-605.

MURPHY, S. 1968. Enzymatic activity and pesticide residues in pinniped tissues, p. 169. In R.V. Alpha Helix Bering Sea Expedition, Project reports of the R.V. Alpha Helix Bering Sea Expedition, February to October, 1968. Phase B. National Science Foundation, National Institute of Health, Washington, DC.

MURRAY, J. 1899. Experiments in branding and herding of seals on St. Paul Island, 1897, p. 336-338. In D.S. Jordan (ed.) Special papers relating to the fur seal and to the natural history of the Pribilof Islands. (U.S. Treas. Dep., Doc. 2017), U.S. Government Printing Office, Washington, DC.

MYERS, B.J. 1959. The stomach contents of harp seal (Phoca groenlandicus Erxleben) from Magdalen Islands, Quebec. Can. J. Zool. 37: 378.

MYHRE, B.A., J.G. SIMPSON, and S.H. RIDGWAY. 1969. Blood groups in the Atlantic bottle-nose porpoise. Fed. Proc. 28: 752A. (Abstr. No. 2760).

MYHRE, B.A., J.G. SIMPSON, and S.H. RIDGWAY. 1971. Blood groups in the Atlantic bottle-nosed porpoise, Tursiops truncatus. Proc. Soc. Exp. Biol. Med. 137: 404-407.

MYRICK, A.C., A.A. HOHN, P.A. SLOAN, M. KIMURA, and D.D. STANLEY. 1983. Estimating age of spotted and spinner dolphins (Stenella attenuata and Stenella longirostris) from teeth. NOAA Technical Memorandum NMFS SWFC30.

NACHTIGALL, P.E. 1975. Food deprivation and work rate of Tursiops truncatus, p. 50. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

NACHTIGALL, P.E. 1980. Odontocete echolocation performance on object size, shape and material, p. 71-95. In R.G. Busnel and J.F. Fish (ed.) Animal sonar systems. Plenum Press, New York, NY.

NACHTIGALL, P.E., R.W. HALL, G.A. PEITERSON, and J.L. RICHARDS. 1981. Chemoreception in the bottlenosed dolphin and California sea lion: methods and initial results, p. 51. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

NAEVDAL, G. 1965. Protein polymorphism used for identification of harp seal populations. Univ. Bergen Arbok Naturvitensk. Rekke 9.

NAEVDAL, G. 1966. Hemoglobins and serum proteins in four north Atlantic seals studied by electrophoresis. Fiskeridir. Skr. Ser. Havunders. 14: 37-50.

NAEVDAL, G. 1969. Blood protein polymorphism in harp seals off eastern Canada. J. Fish. Res. Board Can. 26: 1397-1399.

NAEVDAL, G. 1971. Serological studies on marine mammals. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 161: 136-138.

NAGANO, Y., N. YOSHITAKE, and T. TANAKA. 1969. Antarctic blue whale oil. Gas chromatographic analysis of the lower fatty acids. Kyushu Daigaku Kogaku Shuho 42: 778-783. (In Japanese)

NAGASAWA, K. 1968. Whale (mucous) heparin with high anticoagulant activity. J. Assoc. Off. Anal. Chem. 51: 330-333.

NAGASAWA, K., E. KOSHIMURA, and S. OKAZAKI. 1956. Follicular hormones. XI. Quantitative analysis of follicular hormones in fin whale ovary. Ei Bull. Natl Inst. Hyg. Sci. (Tokyo) 74: 185-187.

NAGASAWA, K., T. YAMAHA, T. KIMURA, and T. TAKAHASHI. 1964. Whale heparin. Seikagaku 36: 29-34.

NAGEL, E.L., P.J. MORGANE, and W.L. McFARLAND. 1964. Anesthesia for the bottlenosed dolphin. Science (Wash. DC) 146: 1591-1593.

NAGEL, E.L., P.J. MORGANE, and W.L. McFARLAND. 1965. Anesthesia for the bottlenose dolphin and author's addendum. Vet. Med. Small Anim. Clin. 61: 233- .

NAGORSEN, D.W., and G.E. STEWART. 1983. A dwarf sperm whale, Kogia simus, new record from the Pacific Coast of Canada. J. Mammal. 64: 505-506.

NAGY, A.R., and K. RONALD. 1970. The harp seal, Pagophilus groenlandicus (Erxleben, 1777). 6. Structure of retina. Can. J. Zool. 48: 367-370.

NAITO, Y., and M. NISHIWAKI. 1975. Ecology and morphology of Phoca vitulina largha and Phoca kurilensis in the southern Sea of Okhotsk and northeast of Hokkaido. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 379-386.

NAKAGAWA, H. 1971a. Occurrence of sialic acid as a component of whale cartilage protein polysaccharide. Bull. Jpn. Soc. Sci. Fish. 37: 192-196.

NAKAGAWA, H. 1971b. Isolation of keratosulfate-like mucopolysaccharide containing a large amount of sialic acid from whale cartilage protein polysaccharide. Bull. Jpn. Soc. Sci. Fish. 37: 197-202.

NAKAGAWA, H., N. ENOMOTO, and Y. TOMIYASU. 1964. Identification of crystalline sialic acid obtained from the nasal cartilage of whale. Bull. Jpn. Soc. Sci. Fish. 30: 580-584.

NAKAI, T. 1959. Distribution of amino acids in proteins from various parts of whale body. 1959. Sci. Rep. Whales Inst. Tokyo 14: 305-326.

NAKAI, T., N. TSUJIGADO, and S. AKIYA. 1963. Extracts from muscle of Balaenoptera physalus. J. Biochem. (Tokyo) 54: 541-549.

NAKAMURA, T., T. HOSOKAWA, and M. TOYOMIZU. 1968. Separation and characterization of

fatty acid amides from visceral lipids of fin whale. Bull. Jpn. Soc. Sci. Fish. 34: 220-224.

NAKAMURA, T., and M. TOYOMIZU. 1967. Analysis of visceral lipids of fin whale by silicic acid column chromatography. Bull. Jpn. Soc. Sci. Fish. 33: 204-209.

NAKAMURA, T., and M. TOYOMIZU. 1970. Gas chromatographic analysis of fatty acid amides in visceral lipid of fin whale. Bull. Jpn. Soc. Sci. Fish. 36: 192-194.

NAKAMURA, Y. and I. TSUJINO. 1952. The fatty acid composition of the head oil of porpoise. Nippon Nogeikagaku Kaishi 26: 642-645.

NAKASHIMA, A., and H. TANAKA. 1966a. Manufacture of chondroitin sulfate from whale nasal cartilage by alkaline liquifaction. II. Preparation of crude chondroitin sulfate by liquefaction at room temperature. Bull. Jpn. Soc. Sci. Fish. 32: 1049-1053.

NAKASHIMA, A., and H. TANAKA. 1966b. Manufacture of chondroitin sulfate from whale nasal cartilage by alkaline liquifaction. III. Deproteinization. Bull. Jpn. Soc. Sci. Fish. 32: 1054-1058.

NAKAYAMA, A. 1950. Bioassay of fat-soluble vitamins. II. Biological determination of vitamin A in whale liver oils. J. Sci. Res. Inst. (Tokyo) 44: 162-170.

NASEDKINA, E.A., and A.L. KRASNITSKAYA. 1972. Determination of creatine and creatinine in the muscle of fish and fish products. Izv. Tikhookean. Nauch.-Issled. Inst. Ryb. Khoz. Okeanogr. 83: 39-43. (In Russian)

NASH, D.R., and J.-P. MACH. 1971. Immunoglobulin classes in aquatic mammals. Characterization by serologic cross-reactivity, molecular size and binding by human free secretory component. J. Immunol. 107: 1424-1430.

NATIONAL RESEARCH COUNCIL OF CANADA, ASSOCIATE COMMITTEE ON SCIENTIFIC CRITERIA FOR ENVIRONMENTAL QUALITY, SUBCOMMITTEE ON HEAVY METALS AND CERTAIN OTHER COMPONENTS. 1978. Effects of arsenic on the Canadian environment. National Research Council, Ottawa, ON. 349 p. (NRCC 15391)

NAUDET, M., E. UCCIANI, and A. UZZAN. (ed.) 1977. Symposium: dietetic and nutritional aspects, Proceedings of the 13th World Congress of the International Society of Fat Research, Symposium 3.

NAUMAN, L.W. 1971. The primary structure of the myoglobins of six species of the order Pinnipedia: a comparative study. Ph.D. Thesis, University of Alaska. (Diss. Abstr. 31(3): 3195-B, 1971)

NAUMOV, A.G., and V.I. CHEKUNOVA. 1980. Energy requirements of pinnipeds. Okeanologiya 20: 534-537. (Oceanology 20: 348-350)

NAZARENKO, Y.I. 1975. Sexual maturity, reproductive rate and missed pregnancy in female harp seals. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 413-415.

NEAVE, D.J., and B.S. WRIGHT. 1968. Seasonal migrations of the harbour porpoise (Phocoena phocoena) and other Cetacea in the Bay of Fundy. J. Mammal. 49: 259-264.

NEDERGAARD, J., W. BECKER, and B. CANNON. 1983. Effects of dietary essential fatty acids on active thermogenin content in rat brown adipose tissue. J. Nutr. 113: 1717-1724.

NEEDHAM, D.J. 1980. A restraint and transport cage for pinnipeds. J. Zoo Anim. Med. 11(1): 20-24.

NEEDHAM, D.J., C.F. CARGILL, and D. SHERIFF. 1980. Hematology of the Australian sea lion, Neophoca cinerea. J. Wildl. Dis. 16: 103-108.

NEILANDS, J.B. 1947. Thiaminase in aquatic animals of Nova Scotia. J. Fish. Res. Board Can. 7: 94-99.

NEIRA, C.D., X.M.P. PATINO, and A.P. SEAGE. 1982. Guide for the identification of Cetacea observed at sea. Mem. Mus. Mar. Ser. Zool. 2(20): 1-28. (In Portuguese)

NELSON, G.J. 1970. Lipid composition of the blood of marine mammals. I. Young elephant seals, Mirounga augustirostris, and harp seals, Pagophilus groenlandicus. Comp. Biochem. Physiol. 34: 109-116.

NELSON, G.J. 1971. Lipid composition of the blood of marine mammals. II. Atlantic bottle-nose dolphin, Tursiops truncatus, and two species of seals, Halichoerus grypus and Phoca vitulina. Comp. Biochem. Physiol. 40B: 423-432.

NELSON, G.J. 1972a. Quantitative analysis of blood lipids, p. 25-73. In G.J. Nelson (ed.) Blood lipids and lipoproteins: quantitation, composition and metabolism. Wiley/Interscience, New York, NY.

NELSON, G.J. 1972b. Lipid composition and metabolism of erythrocytes, p. 317-386. In G.J. Nelson (ed.) Blood lipids and lipoproteins: quantitation, composition and metabolism. Wiley/Interscience, New York, NY.

NELSON, G.J. 1973. The lipid composition of blood of marine mammals. III. Fatty acid composition of plasma and erythrocytes of Atlantic bottle-nose dolphin, Tursiops truncatus. Comp. Biochem. Physiol. 46B: 257-268.

NELSON, R.W., and H.J. BARNETT. 1970. Preliminary study of the proximate composition of meat of fur seal, Callorhinus ursinus. Fish. Ind. Res. 6: 89-92.

NEMOTO, T. 1970. Feeding patterns of baleen whales in the ocean, p. 241-252. In J.H.

Steele (ed.) Marine food chains. Oliver and Boyd, Edinburgh.

NEMOTO, T., and T. KASUYA. 1965. Foods of baleen whales in the Gulf of Alaska of the north Pacific. Sci. Rep. Whales Res. Inst. Tokyo 19: 45-51.

NEMOTO, T., and A. KAWAMURA. 1977. Characteristics of food habits and distribution of baleen whales with special reference to abundance of north Pacific sei and Bryden's whales. Int. Whaling Comm. Rep Comm. 1: 80-87.

NEMOTO, T., and K.R.I. YOO. 1970. An amphipod, Parathemisto gaudichaudii, as a food of Antarctic sei whale (Balaenoptera borealis). Sci. Rep. Whales Res. Inst. Tokyo 22: 153-158.

NERINI, M.K., and J.S. OLIVER. 1983. Gray whales, Eschrichtius robustus, and the structure of the Bering Sea benthos. Oecologia (Berl.) 59: 224-225.

NESHUMOVA, T.V., V.A. CHEREPANOVA, and E.A. PETROV. 1983. Myoglobin distribution in muscles of the seal, Pusa sibirica. Zh. Evol. Biokhim. Fiziol. 19: 93-95. (In Russian)

NESTEROV, G.A. 1965. Immobilization of fur seals. Sb. Nauchn.-Tekhn. Inf. Kirov. 13. (In Russian)

NESTEROV, G.A. 1966. Experimental use of ditilinum in fur seal commercial kill. Izv. Tikhookean. Nauchno.-Issled. Inst. Rybn. Khoz. Okeanogr. 58: 41-48. (In Russian)

NESTEROV, G.A. 1971. The application of a curare-like drug to immobilize sea lions, p. 309-313. In V.A. Arseniev and E.A. Tikhomirov (ed.) Morskie mlekopitayushchie. (kotiki i tyuleni) (Marine mammals (fur seals and seals)). Tr. Vses. Nauchno-Issled. Inst. Morsk. Rybn Khoz. Okeanogr. (VNIRO), 80, Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 82. (In Russian)

NESTEROV, G.A. 1973. The experience of using narcotic drugs and distilline in the harvesting of harp seals. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 87: 219-225. (Israel Program Sci. Translations 1975)

NESTEROV, G.A. 1973a. Experiments in the use of sleep-inducing agents and ditilline in the harvesting of harp seals. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 87: 219-225. (Can. Fish. Mar. Serv. Transl. Ser. 3419, 1975. 12 p.)

NEUGEBAUER, W. 1967. Breeding the southern elephant seal, Mirounga leonina, at Stuttgart Zoo. Int. Zoo Yearb. 7: 152-154.

NEVENZEL, J.C. 1970. Occurrence, function and biosynthesis of wax esters in marine organisms. Lipids 5: 308-319.

NEWBY, T.C. 1978. Pacific harbour seal, p. 185-191. In D. Haley (ed.) Marine mammals of eastern north Pacific and Arctic waters. Pacific Search Press, Seattle, WA.

NICOL, J.A.C. 1967. The biology of marine animals. 2nd ed. Pitman, London.

NIGEN, A.M. 1972. A comparative study of harbour seal and sperm whale myoglobin by chemical modification and 13C-nuclear magnetic resonance. Ph.D. Thesis, Indiana University. (Diss. Abstr. 33 (10): 4706-B)

NIGEN, A.M., and F.R.N. GURD. 1973. Comparison of carboxymethylated patterns of harbour seal and sperm whale myoglobins. J. Biol. Chem. 248: 3708-3715.

NIGEN, A.M., P. KEIM, R.C. MARSHALL, and F.R.N. GURD. 1972a. Reactivity pattern and carbon-13 NMR of seal myoglobin carboxymethylated with enriched 2-carbon-13 bromoacetate. Fed. Proc. 31: 483A.

NIGEN, A.M., P. KEIM, R.C. MARSHALL, V. GLUSHKO, P.J. LAWSON, and F.R.N. GURD. 1973. Natural abundance carbon-13 nuclear magnetic resonance of cyanoferrimyoglobins and of some carboxymethyl derivatives. J. Biol. Chem. 248: 3716-3723.

NIGEN, A.M., P. KEIM, R.C. MARSHALL, J.S. MORROW, and F.R.N. GURD. 1972b. Carbon-13 nuclear magnetic spectroscopy of myoglobins carboxymethylated with enriched (2-13C) bromoacetate. J. Biol. Chem. 247: 4100-4102.

NIGEN, A.M., P. KEIM, R.C. MARSHALL, J.S. MORROW, R.A. VIGNA, and F.R.N. GURD. 1959. Pelagic fur seal investigations, California, Oregon and Washington. U.S. Fish. Wildl. Serv. Bur. Commer. Fish. Mar. Mamm. Res., Seattle, WA.

NIKITENKO, M.F. 1963. Morphology of the brain of the common dolphin (Delphinus delphis) in relation to the specific features of an aquatic way of life, p. 30-31. In Vtoroe Vses. soveschanie po izuchenii morskikh mlekopitayuschikh (Second All-Union meeting to study of sea mammals.) Akad. Nauk SSSR, Moscow. (In Russian)

NIKOLAEV, A.M., and V.A. SKALKIN. 1975. On the food habits of harbor seals off the eastern shores of Sakhalin Island. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 95: 120-124. (In Russian)

NIKOLAEVA, N.E. 1954. The content of tryptophan, trypsin, methionine and cystine in the proteins of the whale. Tr. Vses. Nauchn-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr. 29: 159-162. (In Russian)

NIKOLAEVA, N.E., and R.R. PEREPLETCHIK. 1962. Purification of vitamin A concentrating in miscella. Rybn. Khoz. 38(12): 63-68. (In Russian)

NIKONOVA, N.A. 1957. Investigation of blubber of far eastern whales. Izv. Tikhookean. Nauchn-Issled. Inst. Rybn. Khoz. Okeanogr. 44: 127-169. (In Russian)

NISHIMURA, M. 1926. Chemical study on marine mammals. I. On the adrenal of the whale. Adrenaline. J. Imp. Fish. Inst. (Jpn) 22(2): 22-23.

NISHIWAKI, M., M. NAKAJIMA, and T. TOBAYAMA. 1966. Preliminary experiments for dolphin marking. Sci. Rep. Whales Inst. Tokyo 20: 101-107.

NISHIWAKI, M., and T. TOBAYAMA. 1982. Morphological study on the hybrid between Tursiops and Pseudorca. Sci. Rep. Whales Res. Inst. Tokyo 34: 109-122.

NONAKA, H. 1952. Vitamin B in whale meat. Kaseigaku Zasshi 2: 26-28.

NORES, C., and M.C. PEREZ. 1982. Mass strandings of Cetaceae on the Cantabrian Coasts, northern Spain. Mem. Mus. Mar. Ser. Zool. 2(21): 1-20. (In Spanish)

NORRIS, K.S. 1964. Some problems of echolocation in cetaceans, p. 317-336. In W.N. Tavolga (ed.) Marine bio-acoustics. Vol. 1. Pergamon Press, New York, NY.

NORRIS, K.S. 1968. The evolution of acoustic mechanisms in 'odontocete cetaceans', p. 297-324. In E.T. Drake (ed.) Evolution and environment. Yale University Press, New Haven, CT.

NORRIS, K.S. 1969. The echolocation of marine mammals, p. 391-423. In H.T. Anderson (ed.) The biology of marine mammals. Academic Press, New York, NY.

NORRIS, K.S., and T.P. DOHL. 1971. Observations of free-swimming porpoises and whale schools and studies of the chemistry of head oil in porpoises. U.S. Government Printing Office, Washington, DC. (AD 727 749: 7 p.)

NORRIS, K.S., W.E. EVANS, and G.C. RAY. 1974. New tagging and trading methods for the study of marine mammal biology and migration, p. 395-408. In W.E. Schevill, G.C. Ray, and K.S. Norris (ed.) The whale problem, a status report. Harvard University Press, Cambridge, MA.

NORRIS, K.S., and G.W. HARVEY. 1972. A theory for the function of the spermaceti organ of the sperm whale (Physeter catodon L.), p. 397-317. In S.R. Galler, K. Schmidt-Koenig, G.J. Jacobs, and R.E. Belleveille (ed.) Animal orientation and navigation. National Aeronautics and Space Administration, Washington, DC.

NORRIS, K.S., and G.W. HARVEY. 1974. Sound transmission in the porpoise head. J. Acoust. Soc. Am. 32: 659-664.

NORRIS, K.S., and K.W. PRYOR. 1970. A tagging method for small cetaceans. J. Mammal. 51: 609-610.

NORRIS, K.S., B. VILLA-RAMIREZ, G. NICHOLS, B. WURSIG, and K. MILLER. 1982. Lagoon entrance and other aggregations of gray whales, Eschrichtius robustus, p. 54-61. In R. Payne (ed.) Behaviour and communication of whales. Westview Press, Boulder, CO.

NORTHRUP, M.A. 1981. Evidence of the detoxification of methylmercury by harbour seals, Phoca vitulina richardsi, p. 87. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

NOTEVARP, O., and V. FYRST. 1967. Fatty acid composition of Norwegian fish liver oils, herring oils, whale oils and whale blubber fat, p. 21-33. In F. Bramsmaes et al. (ed.) Fat and oil chemistry, 4th Scandinavian symposium, Turku Aug. 31 - Sept. 3, 1965. Almqvist & Wiksell, Stockholm, Sweden.

NOVIKOVA, E.I. 1952. Examination of some industrial fish and whales as to content of vitamins B_1 and B_2. Rybn. Khoz. 28(11): 57-60. (In Russian)

NOVIKOVA, E.I. 1953. The content of vitamin B_1 and B_2 in the internal organs of Antarctic whales. Tr. Vses. Nauchno-Issled. Inst. Morsk. Ryb. Khoz. Okeanogr. 25: 103-105. (In Russian)

NUMACHI, K. 1970. Lactate and malate dehydrogenase isozyme patterns in fish and marine mammals. Bull. Jpn. Soc. Sci. Fish. 36: 1067-1077.

NYHOLM, E.S. 1975. Observations on the walrus, Odobenus rosmarus, in Spitsbergen in 1971-1972. Ann. Zool. Fenn. 12: 193-196.

ODELL, D.K. 1979. A preliminary study of the ecology and population biology of the bottle-nose dolphin in southeast Florida. Report 1979, M.M.C.-74/07. U.S. Government Printing Office, Washington, DC. (NTIS Rep. PB-294 336, 33 p.) (Gov. Rep. Announce. Index 1979, 79(13), 103)

O'FARRELL, P.H., and J.C. DANIEL. 1971. Estrogen binding in the uteri of mammals with delayed implantations. Endocrinology 88: 1104-1106.

OGATA, K. 1951-1952. The methionine content of the protein of some Japanese foods. J. Jpn. Soc. Food Nutr. 4: 182-183.

OGAWA, T., T. TSUNODA, and M. OSAWA. 1958. Amino acid composition of whale meat. Sci. Rep. Whales Res. Inst. Tokyo 13: 303-307.

OHATA, C.A., and L.K. MILLER. 1976. Recommendations on northern fur seal management based on metabolic and thermoregulatory studies (Abstract). Sci. Alaska 27: 235.

OHATA, C.A., and L.K. MILLER. 1977. Northern fur seal thermoregulation: thermal responses to forced activity on land. J. Therm. Biol. 2: 135-140.

OHATA, C.A., and L.K. MILLER. 1977a. Some temperature responses of northern fur seal (Callorhinus ursinus) pups. J. Mammal. 58: 438-440.

OHATA, C.A., L.K. MILLER, and D.F. HOLLEMAN. 1975. Water metabolism and body composition in the northern fur seal, p. 15. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

OHATA, C.A., L.K. MILLER, and L. IRVING. 1977. Metabolism of northern fur seals Callorhinus ursinus (Abstract). Fed. Proc. 36: 546.

OHATA, C.A., L.K. MILLER, and H. KAJIMURA. 1977a. Northern fur seal thermoregulation: thermal responses to pelagic conditions. J. Therm. Biol. 2: 141-143.

OHATA, C.A., and G.C. WHITTOW. 1974. Conductive heat loss to sand in California sea lions and a harbour seal. Comp. Biochem. Physiol. 47: 23-26.

OHI, G., S. NISHIGAKI, H. SEKI, Y. TAMURA, T. MAKI, Y. MINOWA, Y. SHIMAMURA, I. MIZOGUCHI, Y. INABA. 1980. The protective potency of marine animal meat against neurotoxicity of methyl mercury; its relationship with the organ distribution of mercury and selenium in the rat. Food. Cosmet. Toxicol. 18: 139-146.

OHTA, K., T. WATARARI, T. OISHI, Y. UESHIBA, S. HIROSE, T. YOSHIZAWA, Y. AKIKUSA, M. SATO, and H. OKANO. 1955. Composition of fin whale. Milk. Sci. Rep. Whales Res. Inst. Tokyo 10: 151-167.

OKADA, I., I. OSAKABE, T. KIKUCHI, and E. MORIWAKE. 1953. Polarographic studies on the smell of fish (and whale) meat and oil. J. Tokyo Univ. Fish. 39: 177-184.

OKADA, I., I. OSAKABE, Y. KURATOMI, and E. SEKINE. 1953a. Glutathione in marine products. II. Polarographic determination of glutathione in carp and whale. J. Tokyo Univ. Fish. 39: 185-191.

OKI, T., and K. UENO. 1959. Extraction of nutrients from liver of whales. Japan Patent 2479 (1959), Apr. 15.

OKURA, S., and K. GOTO. 1957. Sperm whale oil. IX. Properties of blubber oil of sperm whales caught in the adjacent waters of Japan. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 88-90.

OKURA, S., and M. MORI. 1957. Quality of whale oil. XXIII. Quality and properties of coastal baleen whale oil. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 45-50.

OKURA, S., and M. MORI. 1957a. Sperm whale oil. VII. Quality and properties of Japanese coastal sperm whale oil. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 77-84.

OKURA, S., M. MORI, and O. HIROI. 1957. Sperm whale oil. XI. Composition of commercial sperm whale alcohols. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 95-139.

OKURA, S., M. MORI, and M. NAGATA. 1952a. Quality of whale oil. V. Properties of sperm whale oil produced at the Japanese coastal whaling station. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 5: 25-26.

OKURA, S., M. MORI, M. NAGATA, and S. YAMADA. 1952b. Quality of whale oil. VII. Properties of Antarctic whale oil. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 5: 35-37.

OKURA, S., and M. NAGATA. 1952. Quality of whale oil. VI. Iodine number of the unsaponifiable matter of sperm whale produced at the Japanese coastal factory. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 5: 32-34.

OKURA, S., and M. NAGATA. 1957. Quality of whale oil. XXIV. Properties of Antarctic baleen whale oil, especially the yearly variation of its iodine number. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 51-56.

OKURA, S., M. NAGATA, and K. NAKAYAMA. 1957a. Quality of whale oil. XXVI. Oil content of Antarctic blue whale blubber and iodine number of blubber oil. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 65-70.

OKURA, S., M. NAGATA, and T. SHIBAZAKI. 1966a. Sperm whale oil. XV. Comparison of alcohol composition between adjacent parts of the body. Nippon Suisan Kabushiki Chuo Kenkyusho Hokoku 10: 25-30.

OKURA, S., M. NAGATA, T. SHIBAZAKI, and H. FUJII. 1966b. Sperm whale oil. XII. Alcohol composition of head oil. Nippon Suisan Kabushiki Chuo Kenkyusho Hokoku 10: 1-8.

OKURA, S., M. NAGATA, T. SHIBAZAKI, and H. FUJII. 1966c. Sperm whale oil. XIII. Alcohol composition of blubber oil. Nippon Suisan Kabushiki Chuo Kenkyusho Hokoku 10: 9-15.

OKURA, S., M. NAGATA, T. SHIBAZAKI, and T. NISHIMURA. 1966d. Sperm whale oil. XVII. Alcohol composition of head and body oils from north Pacific sperm whale. Nippon Suisan Kabushiki Chuo Kenkyusho Hokoku 10: 35-39.

OKURA, S., M. NAGATA, T. SHIBAZAKI, and A. TANAKA. 1966e. Sperm whale oil. XIV.

Variations in alcohol composition of different individuals and parts of the body. Nippon Suisan Kabushiki Chuo Kenkyusho Hokoku 10: 16-24.

OKURA, S., and T. NISHIMURA. 1975a. Sperm whale oil. VI. Properties of Antarctic sperm whale oil. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 75-76.

OKURA, S., and T. NISHIMURA. 1975b. Sperm whale oil. X. Unsaponifiable matter contents of (Japanese coastal) sperm whale oils obtained from various sites of an individual whale. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 91-93.

OKURA, S., T. SHIBAZAKI, and A. TANAKA. 1966f. Sperm whale oil. XVI. Alcohol composition of head-sack and dorsal blubber oil from Antarctic sperm whale. Nippon Suisan Kabushiki Chuo Kenkyusho Hokoku 10: 31-34.

OKURA, S., and Y. TAGUCHI. 1957. Sperm whale oil. VIII. Oil content of Antarctic sperm whale blubber. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 85-87.

OKURA, S., Y. TAGUCHI, and M. NAGATA. 1957b. Quality of whale oil. XXV. Oil content of Antarctic fin whale blubbers and the iodine number of blubber oil. Nippon Suisan Kabushiki Kaisha Kenkyusho Hokoku 8: 57-64.

OKUTANI, T., and T. NERNOTO. 1964. Squids as the food of sperm whales in the Bering Sea and Alaskan Gulf. Sci. Rep. Whales Res. Inst. Tokyo 18: 111-121.

OLAFSON, R.W., and J.A.J. THOMPSON. 1974. Isolation of heavy metal binding proteins from marine vertebrates. Mar. Biol. (Berl.) 28: 83-86. (Also issued as NTIS Report PB-248698, 1976)

OLENCHENKO, G.N. 1972a. Growth dynamics of water volume and mineral content of tissues and organs of the Caspian seal, p. 161-163. In Morskie mlekopetayushchie (Fifth All-Union Conf. Study Mar. Mamm., 19-21 Sept., 1972 Makhachkala). Akad. Nauk SSSR. Zool. Inst., Inst. Evol. Morfol. Ekol. Zhivotn. Inst. Biol. Razrit., Minist. Rybn. Khoz. SSSR. Ikhtiol. Kom. VNIRO Kasp. (In Russian)

OLENCHENKO, G.N. 1972b. Character of the change in volume of albumin and irreplaceable amino acids in the process of growth and development of a Caspian seal, p. 163-166. In Morskie mlekopitayushchie (Fifth All-Union Conf. Study Mar. Mamm., 19-21 Sept. 1972, Makhachkala). Akad. Nauk SSSR Zool., Inst., Inst. Evol. Morfol. Ekol., Zhivotn. Inst. Biol. Razrit. Minist. Rybn. Khoz. SSSR Ikhtiol. Kom. VNIRO Kasp. (In Russian)

OLENCHENKO, G.N., and A.A. MAGOMAEV. 1974. Production of feed meal from Caspian seal carcasses. Rybn. Khoz. 49(2): 72-74. (Israel Program Scientific Translations, 1974)

OLIVER, J. 1981. Walrus feeding in the Bering Sea: a benthic perspective, p. 88. In Symposium: biology of marine mammals. Abstracts. 4th Biennial Conference on the Biology of Marine Mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

OLIVER, J.R. 1912-1913. The spermatogenesis of the Pribilof fur seal (Callorhinus alascanus J. and C.). Am. J. Anat. 14: 473-499.

OLIVER, J.S., P.N. SLATTERY, E.F. O'CONNOR and L.F. LOWRY. 1983. Walrus, Odobenus rosmarus, feeding in the Bering Sea: a benthic perspective. U.S. Natl Mar. Fish. Serv. Fish. Bull. 81: 501-512.

OLIVER, J.S., P.N. SLATTERY, M.A. SILBERSTEIN and E.F. O'CONNOR. 1983a. A comparison of grey whale, Eschrichtius robustus, feeding in the Bering Sea and Baja, California, Mexico. U.S. Natl Mar. Fish. Serv. Fish. Bull. 81: 513-522.

OLSSON, I.U. 1980. Content of carbon-14 in marine mammals from northern Europe. Radiocarbon 22: 662-675.

OLSSON, M. 1978. PCB and reproduction among Baltic seals, p. 40-45. In Symposium: conservation of Baltic seals, Proceedings of symposium conservation Baltic seals, April 26-28, 1977, Haikko, Finland. (Riistatiet. Julk. 37)

OLSSON, M. 1983. The environmental specimen bank at the Swedish Museum of Natural History, intention and methods. Mem. Soc. Fauna Flora Fenn. 59: 93-100.

OMOTE, Y. 1959. The absorption spectrum of the molecular distallation residue of whale liver oil. Bull. Jpn Soc. Sci. Fish. 80: 804-805.

OMURA, H. 1950. On the body weight of sperm and sei whales located in the adjacent waters of Japan. Sci. Rep. Whales Res. Inst. Tokyo. 4: 1-13.

OMURA, H., and H. SAKIURA. 1956. Studies on the little piked whales from the coast of Japan. Sci. Rep. Whales Res. Inst. Tokyo 16: 7-18.

ONO, F., and Y. TOYAMA. 1954. Moisture content of fatty oils, especially of castor oil. Nagoya Sangyo Kagaku Kenkyusho Kenkyu Hokoku 7: 43-45.

ORITSLAND, N.A. 1968. Variations in body surface temperature of the harp seal. Acta Physiol. Scand. 73: 35A.

ORITSLAND, N.A. 1970. Temperature regulation of the polar bear. Comp. Biochem. Physiol. 37: 225-233.

ORITSLAND, N.A. 1970a. Sealing and seal research in the Southwest Atlantic pack

ice, September-October 1964. Antarct. Ecol. 1: 367-376.

ORITSLAND, N.A. 1971. The status of Norwegian studies of harp seals at Newfoundland. Int. Comm. Northwest Atl. Fish. Redbook Part III: 185-209.

ORITSLAND, N.A. 1971a. Progress report on Norwegian studies of harp seals at Newfoundland. Int. Comm. Northwest Atl. Fish. Res. Doc. 71/8.

ORITSLAND, N.A. 1971b. Wavelength-dependent solar heating of harp seals (Pagophilus groenlandicus). Comp. Biochem. Physiol. 40A: 359-361.

ORITSLAND, N.A. 1974. A windchill and solar radiation index for homeotherms. J. Theor. Biol. 47: 413-420.

ORITSLAND, N.A. 1975. Sexual maturity and reproductive performance of female hooded seals at Newfoundland. Int. Comm. Northwest Atl.Fish. Res. Bull. 11: 37-41.

ORITSLAND, N.A. 1977. A model of energy balance in Arctic mammals. In N.A. Oritsland (ed.) Progress in mathematical modelling. Norsk Polarinstitutt Arbok, Oslo.

ORITSLAND, N.A., and D.M. LAVIGNE. 1976. Radiative surface temperatures of exercising polar bears. Comp. Biochem. Physiol. 53: 327-330.

ORITSLAND, N.A., D.M. LAVIGNE, and K. RONALD. 1978. Radiative surface temperatures of harp seals. Comp. Biochem. Physiol. 61A: 9-12.

ORITSLAND, N.A., and K. RONALD. 1973. Effects of solar radiation and windchill on skin temperature of the harp seal, Pagophilus groenlandicus. Comp. Biochem. Physiol. 44A: 519-525.

ORITSLAND, N.A., and K. RONALD. 1975. Energetics of the free diving harp seal (Pagophilus groenlandicus). Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 451-454.

ORITSLAND, N.A., and K. RONALD. 1977. A simulation programme for heat balance in marine mammals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1977/N:8.

ORITSLAND, N.A., and K. RONALD. 1978. Aspects of temperature regulation in harp seal pups evaluated by in vivo experiments and computer simulations. Acta Physiol. Scand. 103: 263-269.

ORITSLAND, N.A., and K. RONALD. 1978a. Solar heating of mammals: observations of hair transmittance. Int. J. Biometeorol. 22: 197-201.

ORITSLAND, N.A., and T.G. SMITH. 1975. Heat budget and insulation in marine mammals: effect of crude oil on ringed seal pelts. Canada Department of the Environment Canadian Wildlife Service Beaufort Sea Project. Unpublished Report. 17 p.

ORITSLAND, N.A., and T.G. SMITH. 1976. Energy blance in marine mammals: the effect of crude oil on ringed seal fur. Canada Department of the Environment Beaufort Sea Project. Unpublished Report.

ORITSLAND, T. 1977. Food consumption in the Antarctic pack ice, p. 749-768. In G.A. Llano (ed.) Symposium: adaptations within Antarctic ecosystems, Proceedings of the 3rd SCAR symposium on Antarctic biology, Washington, DC, 1974.

ORR, M.B., E.J. KIRK, and M.W. CAWTHORN. 1983. Morphologic and histological features of the integument of the New Zealand sea lion, Phoarctos hookeri. N. Z. J. Zool. 10: 289-294.

ORR, R.T. 1972. Marine mammals of California. University of California Press, Berkeley, CA. 64 p.

ORTIZ, C.L., D. COSTA, and B.J. LE BOEUF. 1978. Water and energy flux in elephant seal pups fasting under natural conditions. Physiol. Zool. 51: 166-178.

ORTIZ, C.L., D.P. COSTA, and B.J. LE BOEUF. 1981. Milk intake of northern elephant seal pups: an index of parental investment, p. 89. In Symposium: biology of marine mammals. Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

OSAWA, T., I. ITOH, and Y. NOZAKA. 1981. The structure of the dentine of sperm whales. Bull. Tokyo Dent. Coll. 22: 41-50.

OSBORNE, T.O. 1983. A northern sea lion, Eumetopias jubatus, rookery on the coast of Humboldt County, California, U.S.A. Murrelet 64: 18-20.

OSEKI, T. 1934. Nutritive value of whale liver. Rikagaku Kenkyusho Iho 13: 1160-1165.

O'SHEA, T.J., R.L. BROWNELL, JR., D.R. CLARK, JR., W.A. WALKER, M.L. GAY, and T.G. LAMONT. 1980. Organochlorine pollutants in small cetaceans from the Pacific and south Atlantic oceans, November 1968-June 1976. Pestic. Monit. J. 14: 35-46.

OSIPOV, M.P. 1931. Industrial fat of the Caspian seal: physico-chemical constants. Otchet. Astrakhan Nauchn. Rybokhoz. Stn 7: 48-71. (In Russian)

OSIPOVA, E.A. 1974. Methods for detecting lipofuscin. What detects Schmorls reagent? Arkh. Patol. 36: 80-81. (In Russian)

OSIPOVA, E.A. 1976. Histology and histochemistry of seal ovaries and age-related changes in the ovaries of the Greenland

seal. Arkh. Anat. Gistol. Embriol. 70: 29-36. (In Russian)

OSIPOVA, E.A. 1976a. Histochemical study of phosphomono-esterases of steroid hormone producing cells. Arkh. Anat. Gistol. Embriol. 71: 85-88. (In Russian)

OSIPOVA, T.A., A.A. BULATOV, and YU.A. PANKOV. 1978. Structural studies of tryptic peptides from large cyanogen bromide fragments of the whale (Balaenoptera borealis) somatotropin. Biorg. Khim. 4: 1589-1599. (In Russian)

OSTERBERG, C., W. PEARCY, and N. KUJALA. 1964. Gamma-emitters in a fin whale. Nature (Lond.) 204: 1006-1007.

OSTFELD, R.S. 1982. Foraging strategies and prey switching in the California sea otter, Enhydra lutris. Oecologia (Berl.) 53: 170-178.

OTOTANI, N., M. KIKUCHI, and Z. YOSIZAWA. 1981. Comparative studies on the structures of highly active and relatively inactive forms of whale heparin. J. Biochem. (Tokyo) 90: 241-246.

OTOTANI, N., M. KIKUCHI, and Z. YOSIZAWA. 1982. Structure and biological activity of finback whale (Balaenoptera physalus L.) heparin octasaccharide. Chemical, carbon-13 nuclear magnetic resonance, enzymic and biological studies. Biochem. J. 205: 23-30.

OTTEN, T., and B. ANDREWS. 1976. Report on the successful rearing of a California sea lion. Aquat. Mamm. 4: 21-25.

OTTEN, T., B. ANDREWS, and D.D. EDWARDS. 1977. Hand rearing a California sea lion, Zalophus californianus. Int. Zoo. Yearb. 17: 215-218.

OVERHOLTZ, W.J., and J.R. NICOLAS. 1979. Apparent feeding by the fin whale, Balaenoptera physalus, and humpback whale, Megaptera novaengliae, on the American sand-lance, Ammodytes americanus, in the northwest Atlantic. U.S. Natl Mar. Fish. Serv. Fish. Bull. 77: 285-287.

OWEN, T.G., and P.W. HOCHACHKA. 1974. Purification and properties of dolphin muscle asparate and alanine transaminases and their possible roles in the energy metabolism of diving mammals. Biochem. J. 143: 541-553.

PAGE, L.B., J.C. SCOTT-BAKER, G.A. ZAK, E.L. BECKER, and C.F. BAXTER. 1954. The effect of variation in filtration rate on the urinary concentrating mechanism in the seal, Phoca vitulina. J. Cell. Comp. Physiol. 43: 257269.

PALIMETER, R.D. 1969. What regulates lactose content in milk? Nature (Lond.) 221: 912-914.

PALMISANO, J.F., and J.A. ESTER. 1977. Ecological interactions involving sea otters, p. 527-567. In M.L. Merrett and R.G. Fuller (ed.) The environment of Amchitka Island, Alaska. Technical Information Center, Energy Research and Development Administration. (Available from National Technical Information Service as TID-26712)

PALO, P.J. 1972. Notes on the natural history of the killer whale, Orcinus orca, in Washington state. Murrelet 53: 22-24.

PALUMBO, N.E., J. ALLEN, C. WHITTOW, and S. PERRI. 1971. Blood collection in the sea lion. J. Wildl. Dis. 7: 290-291.

PANINA, G.K. 1966a. Food of fur seals in the western part of the Pacific Ocean. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 58: 23-40. (In Russian)

PANINA, G.K. 1966b. About nutrition of the sea lion and seals on the Kuril Islands. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 58: 235-236. (In Russian)

PANINA, G.K. 1969. On feeding of fur seals in Bering Sea, p. 174-177. In Morskie mlekopitayushchie (4th All-Union Conf. Study Mar. Mamm., Kaliningrad, 16-18 Sept., 1969.) Akad. Nauk SSSR Zool. Inst., Inst. Evol. Morfol. Ekol. Zhivotn. Inst. Biol. Razrit.; Minist. Rybn. Khoz. SSSR Ikhtiol. Kom. VNIRO Atl. (Summary) (In Russian)

PANINA, G.K. 1970. Nutrition of fur seals in the district of Commander Islands. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr., 70: 38-43. (In Russian)

PANINA, G.K. 1971. Food habits and food resources of fur seals in the Sea of Japan, p. 65-76. In V.A. Arseniev and E.A. Tikhomirov (ed.) Morskie mlekopitayshchie (kotiki i tyuleni) (Marine mammals (fur seals and seals)). Tr. Vses. Nauchno-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr. 82; Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 80. (Fish Res. Board Can. Transl. Ser. 2497, 1974)

PANINA, G.K. 1972. Fattening as an indicator of well fed fur seals in the pelagic period of their life, p. 59-61. In Morskie mlekopitayushchie (Fifth All Union Conf. Study Mar. Mamm., 19-21 Sept., 1972, Makhachkala). Akad. Nauk SSSR Zool. Inst., Inst. Evol. Morfol. Ekol. Zhivotn. Inst. Biol. Razrit., Minist. Rybn. Khoz. SSSR Ikhtiol. Kom. VNIRO Kasp. (Abstract) (In Russian)

PANKOV, YU.A. 1982. Role of proteolytic enzymes in certain stages of the biological action of somatotropic hormones. Vestn. Akad. Med. Nauk SSSR 9: 38-45. (In Russian)

PANKOV, YU.A., A.A. BULATOV, and T.A. OSIPOVA. 1982. Primary structure of sei whale pituitary somatotropin. Int. J. Pept. Protein Res. 20: 396-399.

PANKOV, YU.A., A.A. BULATOV, T.A. OSIPOVA, YU.M. KEDA, and A.L. SINITSINA. 1976a. Structural characteristics of the cyanogen bromide fragments of sei whale (Balaenoptera borealis) pituitary somatrotropin. Biokhimiya 41: 2047-2055. (In Russian)

PANKOV, YU.A., A.A. BULATOV, T.A. OSIPOVA, and O.P. NIKOLAEVA. 1978. Study of the primary structure of the pituitary body hormones of a whale (Balaenoptera borealis). Tezisy Dokl. Sov.-Indiiskii Simp. Khim. Prir. Soedin., 5th, (1978): 70. (In Russian)

PANKOV, YU.A., O.P. NIKOLAEVA, and G.P. ELIZAROVA. 1976b. Primary structure of corticotropin from the common fin whale (Balaenoptera physalus). Bioorg. Khim 2: 855-856. (In Russian)

PANKOV, YU.A., O.P. NIKOLAEVA, and G.P. ELIZAROVA. 1977. Amino acid sequence of corticotropins from the sei whale (Balaenoptera borealis) and finback whale (Balaenoptera physalus). Biokhimiya 42: 2044-2050. (In Russian)

PAPKOFF, H. and C.H. LI. 1958. The isolation and characterization of growth hormone from anterior lobes of whale pituitaries. J. Biol. Chem. 231: 367-377.

PARCHEVSKII, V.P., N.V. SOKOLOVA, and D.S. PARCHEVSKAYA. 1973. Logarithmically normal distribution of strontium-90 concentrations in mammals of Sea of Okhotsk and Bering Sea. Mater. Vses. Simp. "Teor. Prakt. Aspekty Deistviya Malykh Doz. Ioniz. Radiats." 1973: 165-166. (In Russian)

PARKS, Jr, R.E., P.R. BROWN, Y.-C. CHENG, K. AGARWAL, C.M. CHONG, R.P. AGARWAL, and C.C. PARKS. 1973. Purine metabolism of primitive erythrocytes. Comp. Biochem. Physiol. 45B: 355-364.

PARRY, D.A. 1949. The structure of whale blubber and a discussion of its thermal properties. Q. J. Microsc. Sci. 90: 13-25.

PARRY, K., S.S. ANDERSON, and M.A. FEDAK. 1981. Chemical immobilization of gray seals. J. Wildl. Manage. 45: 986-990.

PARODI, P.W. 1982. Positional distribution of fatty acids in triglycerides from milk of several species of mammals. Lipids 17: 437-442.

PARSONS, J.L. 1977. Metabolic studies on ringed seals (Phoca hispida). M.Sc. Thesis, University of Guelph, Guelph, ON. 82 p.

PARSONS, J.L., J.R. GERACI, and T.G. SMITH. 1981. Minimal energy requirements of captive ringed seals, Phoca hispida, p. 91. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Centre.

PARTMAN, W., and H. SCHLASZUS. 1973. Comparison of the patterns of five ninhydrin-reactive substances in muscles of food animals and little piked whale (Balaenoptera acutorostrata). Z. Lebensm. Unters. Forsch 153: 265-270.

PASCAL, J.C., and R.G. ACKMAN. 1975. Occurrence of 7-methyl-7-hexadecenoic acid, the corresponding alcohol, 7-methyl-6-hexadecenoic acid and 5-methyl-4-hexadecenoic acid in sperm whale oils. Lipids 10: 478-482.

PASTUKHOV, V.D. 1969. Research on nutrition of the Baikal seals, p. 110-112. In Morskie mlekopitayushchie (4th All-Union Conf. Study Mar. Mamm., Kaliningrad, 16-18 Sept., 1969). Akad. Nauk SSSR Zool. Inst., Inst. Evol. Morfol. Ekol. Zhivotn. Inst. Biol. Razrit., Minist. Rybn. Khoz. SSSR Ikhtiol. Kom. VNIRO Atl. (Summary) (In Russian)

PASTUKHOV, V.D. 1971. Feeding of the Baikal seal under experimental conditions. Tr. Atl. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 39: 280-285. (Fish. Res. Board Can. Transl. Ser. 3185, 1974: 451-460)

PASTUKHOV, V.D., G.V. STARTSKOV, and S.A. SHALASHOV. 1969. Age and weight characteristics of the Baikal sculpins forming the food of the Baikal seal. Vop. Ikhtiol. 9(6): 1077-1088. (Probl. Ichthyol. 9: 866-875)

PATASHNIK, M., and P. KANGAS. 1971. Tek-food, a pasteurized whole fish ration for captive marine mammals. Lab. Anim. Sci. 21: 406.

PATENAUDE, R.P. 1979. Evaluation of fentanyl citrate, etorphine HCl and naloxone•HCl in captive polar bears. J. Am. Vet. Med. Assoc. 175: 1006-1007.

PATHAK, S.P., P.N. SUWAL, and C.V. AGARWAL. 1956. Component acids of suinsh blubber and liver fats. Biochem. J. 62: 634-637.

PATTEN, D.R., and S. SARUBA. 1979. Analysis of marine mammal strandings in Los Angeles and Orange Counties, 1975-1978, p. 44. In Symposium: biology of marine mammals, Abstracts. Presentations at the 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

PATTERSON, J.H. 1972. Thermoregulation in the harbour seal, Phoca vitulina richardi, with particular reference to the insulative quality of the dry pelage. B.Sc. Thesis, University of British Columbia, Vancouver, BC.

PAULY, L.K., and H.R. WOLFE. 1957. Serological relationship among members of the order Carnivora. Zoologia (N.Y.) 42: 159-166.

PAYNE, M.R. 1977. Growth of a fur seal population. Philos. Trans. R. Soc. Lond. B Biol. Sci. 279: 67-69.

PAYNE, M.R. 1979. Growth in the Antarctic fur seal, Arctocephalus gazella. J. Zool. (Lond.) 187: 1-20.

PAX, F., and W. ARNDT. 1929. Die Rohstoffe des Tierreichs. 1: 1-160 (Lief 3).

PCB CONFERENCE 2. 1973. PCB Conference 2. Natl Swed. Environ. Protect. Publ. 4E.

PEAK, M.J., F.T. ROBB, and C.W. SAPSFORD. 1971. Comparison of lactate dehydrogenase isozymes from Weddell and Cape fur seals. Comp. Biochem. Physiol. 38B: 471-474.

PEAKER, M., and J.A. GOODE. 1978. The milk of the fur seal, Arctocephalus tropicalis gazella, in particular the composition of the aqueous phase. J. Zool. Lond. 185: 469-476.

PEARCE, P.A., M. GRUCHY, and J.A. KEITH. 1973. Toxic chemicals in living things in the Gulf of St. Lawrence. In Symposium: renewable resource management of the Gulf of St. Lawrence, Proceedings of the Joint Symposium of the Canadian Society of Wildlife and Fish Biology and Canadian Society of Zoology. January 5, Halifax, Nova Scotia.

PEARSE, J.S. 1975. The habitat of the California sea otter, p. 6-7. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on the biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

PEARSON, A.K., and R.K. ENDERS. 1951. Further observations on the reproduction of the Alaskan fur seal. Anat. Rec. 111: 695-711.

PEDERSEN, J.I., and H.J. GRAV. 1972. Physiologically induced loose-coupling of brown adipose tissue mitochondria correlated to endogenous fatty acids and adenosine phosphates. Eur. J. Biochem. 25: 75-83.

PEDERSEN, T. 1950. Whale oils: content of saturated fatty acids in whale oils. Hvalradets Skr. 34: 1-54.

PEDERSEN, T. 1952a. A note on the oil, milk and milk fat of humpback whale, (Megaptera nodosa). Nor. Hvalfangst. Tid. 41: 375-378.

PEDERSEN, T. 1952b. Oil from the meat of sperm whale (Physeter catodon). Nor. Hvalfangst Tid. 41: 296-298.

PEDERSEN, T. 1952c. The milk fat of the sperm whale (Physeter catodon). Nor. Hvalfangst Tid. 41: 300.

PEEL, D.A. 1975. Organochlorine residues in Antarctic snow. Nature (Lond.) 254: 324-325.

PENNER, R.H., and A.E. MURCHISON. 1970. Experimentally demonstrated echolocation in the Amazon River porpoise, Inia geoffrensis (Blainville). Naval Undersea Research and Development Center Publication NUC TP 187 Rev. 1.

PERCY, J.A. 1977. Effects of oil on Arctic marine organisms: a review of studies conducted by the Arctic Biological Station. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Fish. Improv. Comm. 1977 E:26.

PEREPLETSHIK, R.R. 1951. Content of vitamin A in the liver and other internal organs of commercial fish and porpoises of the Baltic and Azov Sea Basins, p. 139-158. In Vitaminnye Resursy i Ispol'zovanie Sbornik 1, Akad. Nauk SSSR, Inst. Biokhim. im. A.N. Bukha.

PEREZ, M.A. 1981. Estimates of sample size for fur seal food habits studies based on stomach contents assessment, p. 92. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

PEREZ, M.A., and E.E. MOONEY. 1981. Energetics and food consumption of lactating northern fur seals, Callorhinus ursinus, p. 82. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

PERKINS, J.S., P.J. BRYANT, G. NICHOLS, and D.R. PATTEN. 1982. Humpback whales, Megaptera novaeangliae, off the west coast of Greenland. Can. J. Zool. 60: 2921-2930.

PERKINS, J.S., and G.W. MILLER. 1983. Mass strandings of Steno bredanensis in Belize. Biotropica 15: 235-236.

PERKS, A.M., and E. VIZSOLYI. 1973. Studies on the neurohypophysis of foetal mammals, p. 430-438. In R.S. Comline, K.W. Cross, G.S. Dawes and P.W. Nathanielsz (ed.) Foetal and neonatal physiology. Cambridge University Press, London.

PERKS, A.M., and E. VIZSOLYI. 1974. Studies of neurohypophyseal peptides during fetal life, p. 317. In F. Knowles and L. Vollrath (ed.) Neurosecretion. The final endocrine pathway. Sixth international symposium, London, England, 1973. Springer Verlag, New York, NY.

PERLOV, A.S. 1975. Feeding of the Steller sea lion in the region of the Kuril Islands.

Ekologia (4): 106-108. (Sov. J. Ecol. 6: 382-384).

PERNIA, S.D., D.P. COSTA, and C.L. ORTIZ. 1981. Glomerular filtration rate (GFR) in fasting weaned elephant seal pups, Mirounga angustirostris, p. 93. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

PERNIA, S.D., A. HILL, and C.L. ORTIZ. 1980. Urea turnover during prolonged fasting in the northern elephant seal, Mirounga angustirostris. Comp. Biochem. Physiol. 65B: 731-734.

PERNIA, S.D., C.L. ORTIZ, and A. HILL. 1979. Protein catabolism during prolonged fasting in the northern elephant seal, p. 47. In Symposium: biology of marine mammals, Abstracts. Presentations at the 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

PERRIN, W.F., W.E. EVANS, and D.B. HOLTS. 1979. Movements of pelagic dolphins (Stenella spp.) in the eastern tropical Pacific as indicated by results of tagging, with summary of tagging operations, 1969-76. U.S. Natl Mar. Fish. Serv. Spec. Sci. Rep. Fish. 737: 14 p.

PERRIN, W.F., and C.L. HUBBS. 1969. Observations on a young pygmy killer whale (Feresa attenuata Gray) from the eastern tropical Pacific Ocean. Trans. San Diego Soc. Nat. Hist. 15: 297-308.

PERRIN, W.F., and A.C. MYRICK, Jr. (ed.). 1979. Report on the workshop on age determination of odontocete cetaceans and sirenians. La Jolla, CA, September 1978. U.S. National Marine Fisheries Service, Southwest Fisheries Centre, La Jolla. Unpublished manuscript.

PERRIN, W.F., R.R. WARNER, C.H. FISCUS, and D.B. HOLTS. 1973. Stomach contents of porpoise, Stenella sp. and yellowfin tuna, Thunnus albacares, in mixed species aggregations. U.S. Natl Mar. Fish. Serv. Fish Bull. 71: 1077-1092.

PETERS, H., and Th. WIESKE. 1966. Detection of traces of polybranched fatty acids in fats. Fette Seifen Anstrichm. 68: 947-950.

PETERSON, R.S. 1965. Immobilizing and marking of northern fur seals. Drugs for handling fur seals. J. Wildl. Manage. 29: 688-693.

PETROV, K.P. 1933. Physikalisch-Chemische Characteristik der Groenlandrobbe (Phoca groenlandica). Tr. Vses. Nauchno-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr. 1: 42-65. (In Russian)

PETROV, Y.M., and A.F. FEDOROV. 1967. Strontium-99 content in bone of harp seal (Pagophilus groenlandicus) and hooded seal (Cystophora cristata). Tr. Polyarn. Nauchno-Issled. Proektn. Inst. Morsk. Rybn. Khoz. Okeanogr. 10: 195-197. (In Russian)

PHILIPPI, R.A. 1888. Berichtung der Synonymie von Otaria phillippi Peters. Arch. Naturgesch. 54: 117-118.

PICKEN, M.J. 1975. The rearing of, and some experiments with, a common seal, Phoca vitulina vitulina L. Rep. Underwat. Assoc. N.S. 1: 50-56.

PICKEN, M.J. 1978. The growth and behavior of a land reared common seal, Phoca vitulina vitulina, after release to the sea. J. Zool. (Lond.) 186: 534-539.

PIERCE, R.W. 1970. The design and operation of a metabolic chamber for marine mammals. Ph.D. Thesis, University of California, Berkeley, CA.

PIEROTTI, R.J., and D. PIEROTTI. 1980. Effects of cold climate on the evolution of pinniped breeding systems. Evolution 34: 494-507.

PIHL, A. 1952. Cholesterol. I. The cholesterol content of food. Scand. J. Clin. Lab. Invest. 4: 115-121.

PIKE, G.C. 1950. What do whales eat? Can. Fisherman 37(9): 11.

PIKE, G.C. 1962. Migration and feeding of a gray whale (Eschrichtius gibbosus). J. Fish. Res. Board Can. 19: 815-838.

PIKHAREV, G.A. 1941. Some data on the feeding of the far eastern bearded seal. Izv. Tikhokean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 20: 101-120. (Translation by University of Alaska, Fairbanks)

PIKHAREV, G.A. 1946. The food of the seal, Phoca hispida. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Okeanogr. 22: 259-261. (Fish. Res. Board Can. Transl. Ser. 150, 1957)

PILLERI, G. 1966. Brain lipoma in the humback whale, Megaptera novaeangliae. Path. Vet. 3: 341-349.

PILLERI, G. 1982. Observations on the behaviour, sense of vision and sonar field of some cetaceans in captivity. Invest. Cetacea 13: 167-176.

PILLERI, G. 1983. The sonar system of dolphins. Endeavour (Oxf.) 7: 59-64.

PILLERI, G., and M. GIHR. 1975. On the taxonomy and ecology of the finless black porpoise, Neophocoena, Cetacea, Delphinidae. Mammalia 39: 657-673.

PILLERI, G., M. GIHR, and C. KRAUS. 1982a. Osteological considerations of the shape of the sonar field on the narwhal, Monodon monoceros. Invest. Cetacea 13: 205-222.

PILLERI, G., M. GIHR, and C. KRAUS. 1982b. Considerations on the sonar emission field of Pontoporia blainvillei with osteological remarks on the pterygoid region of cetaceans. Invest. Cetacea 13: 223-242.

PILSON, M.E.Q. 1965. Absence of lactose from the milk of the Otarioidae. A superfamily of marine mammals. Am. Zool. 5: 220-221.

PILSON, M.E.Q. 1967. In pursuit of sea mammal's milk. Maritimes 11: 1-4.

PILSON, M.E.Q. 1970a. Water balance in California sea lions. Physiol. Zool. 43: 257-269.

PILSON, M.E.Q. 1970b. Pilot whale tears. J. Mammal. 51: 625-626.

PILSON, M.E.Q., and A.L. KELLY. 1962. Composition of the milk from Zalophus californianus, the California sea lion. Science (Wash. DC) 135: 104-105.

PILSON, M.E.Q., and D.W. WALKER. 1970. The composition of milk from spotted and spinner porpoises. J. Mammal. 51: 74-79.

PIMLOTT, D.H.A. 1974. The hazardous search for oil and gas in Arctic waters. Nat. Can. (Ottawa) 3: 20-28.

PINNEY, T.C., R.C. HUBBARD, and R.A. JENNINGS. 1965. The raising of Steller sea lion pups, Eumetopias jubata. In Stanford Research Institute, Progress Report. 1965. Echo ranging signals of sea lions and seals. Prepared for U.S. Dept. Health, Education and Welfare by T.C. Poulter, Stanford Research Institute. Proj. No. 4662: Natl Inst. Health Control, NBO 4736-02.

PITCHER, K.W. 1977. Population productivity and food habits on harbour seals in the Prince William Sound - Copper River delta area, Alaska. U.S. Marine Mammal Commission, Washington, DC. Final Rep. Contract No. MM5AC011, U.S. Government Printing Office, Washington, DC. (Available from NTIS as PB-266 935: 36 p.)

PITCHER, K.W. 1980a. Food of the harbour seal, Phoca vitulina richardsi, in the Gulf of Alaska, U.S.A.. U.S. Natl Mar. Fish. Serv. Fish. Bull. 78: 544-549.

PITCHER, K.W. 1980b. Stomach contents and feces as indicators of harbour seal, Phoca vitulina, foods on the Gulf of Alaska, U.S.A. U.S. Natl Mar. Fish. Serv. Fish. Bull. 78: 797-798.

PITCHER, K.W. 1981. Prey of the steller sea lion, Eumetopias jubatus, in the Gulf of Alaska, U.S.A. U.S. Natl Mar. Fish. Serv. Fish. Bull. 79: 467-472.

PITCHER, K.W., and D.G. CALKINS. 1975. Distribution of marine mammals in relation to petrochemical development in Prince William Sound and the Gulf of Alaska, p. 32. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on the biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

POCCHIARI, F., L. TENTORI, and G. VIVALDI. 1962. The presence of the dipeptude ß-alanyl-3-methyl histidine in whale meat extract. Sci. Rep. Ist. Super. Sanita 2: 188-194.

PONCZ, L., and D.G. DEARBORN. 1983. Resistance to tryptic hydrolysis of peptide bonds adjacent to N-epsilon-N-dimethyllysyl residues. J. Biol. Chem. 258: 1844-1850.

PONGANIS, P.J, and R.W. PIERCE. 1978. Muscle metabolic profiles and fiber-type composition in some marine mammals. Comp. Biochem. Physiol. 59B: 99-102.

POPOV, L.A. 1960. On the sexual maturity of hooded seals. Trudy Khoz. Okeanogr. Murmansk 12: 119-125. (In Russian)

POPOV, L.A. 1971. The causes and dimensions of the natural mortality of young seals during the lactation period. Tr. Atl. Nauchno-Issled. Inst.Rybn. Khoz. Okeanogr. 39: 100-109. (Can. Fish. Mar. Serv. Transl. 3185, 1974: 159-176)

POPOV, N.I., K.A. MROCHKOV, and E.D. KAVERZNEVA. 1976. Study on the composition of whale meat as a source of high quality proteins. Vopr. Pitan. 4: 78-82. (In Russian, English summary)

POTELOV, V.A. 1975. Reproduction of the bearded seal (Erignathus barbatus) in the Barents Sea. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 554.

POULTER, T.C. 1965a. Derivation of a simple equation for determination of the weight of the seal or sea lion from measurements of its length and girth. In Stanford Research Institute, Progress Report 1965. Echo ranging signals of sea lions and seals. Prepared for U.S. Department of Health, Education and Welfare by T.C. Poulter, Stanford Research Institute, Proj. No. 4662; Natl Inst. Health, Contract NBO 4736-02, Chapter 1.

POULTER, T.C. 1965b. Tranquilizing and anesthetizing experiment with a 500 pound California sea lion bull, Zalophus californianus, November 22 through 26, 1963. In Stanford Research Institute, Progress Report 1965. Echo ranging signals of sea lions and seals. Prepared for U.S. Department of Health, Education and Welfare by T.C. Poulter, Stanford Research Institute, Proj. No. 4662; Natl Inst. Health, Contract NBO 4736-02.

POULTER, T.C. 1969. Conditioning marine mammals for testing echolocation abilities, p. 57-62. In Symposium: Biological sonar and diving mammals, Proceedings of the 6th annual conference on biological sonar and diving mammals, October 17-18, 1969.

Stanford Research Institute, Biological Sonar Laboratory, Menlo Park, CA.

POULTER, T.C., T.C. PINNEY, R.A. JENNINGS, and R.C. HUBBARD. 1965. The rearing of Steller sea lions, p. 49-62. In Symposium on biological sonar and diving mammals, Proceedings of the 2nd annual conference on biological sonar and diving mammals, Menlo Park, CA.

POWER, G., and J. GREGOIRE. 1978. Predation by freshwater seals on the fish community of Lower Seal Lake, Quebec, Canada. J. Fish Res. Board Can. 35: 844-850.

PRATHAP, K., N.G. ARDLIE, J.C. PATTERSON, and C.J. SCHWARTZ. 1966. Spontaneous arterial lesions in the Antarctic seal. Arch. Pathol. 82: 287-296.

PRATO, C.M., T.G. AKERS, and A.W. SMITH. 1974. Serological evidence of calicivirus transmission between marine and terrestrial mammals. Nature (Lond.) 249: 255-256.

PRELOG, V., and P. MEISTER. 1949. Organ extracts. XVII. The isolation of progesterone from the corpus luteum of the whale. Helv. Chim. Acta 32: 2435-2439.

PRITCHARD, H., and M. CAWTHORNE. 1955. Composition of whale meat meals of various grades. J. Sci. Food Agric. 6: 148-153.

PRITCHARD, H., and P.A. SMITH. 1960. Composition and amino acid content of high grade whalemeat meal. J. Sci. Food Agric. 11: 249-252.

PRITCHARD, H., and D.R. WRAIGE. 1952. The value of whale liver meal and whale meat meal as sources of the vitamin B complex in the ration of farm animals. J. Sci. Food Agric. 3: 74-77.

PROSKURYAKOV, M.T. 1972. Chymotrypsinogen content in the pancreas of different animal species. Prikl. Biokhim. Microbiol. 8: 468-469. (In Russian)

PROSSER, C.L. (ed.) 1967. Molecular mechanisms of temperature adaptations. A symposium. American Association for the Advancement of Science, Washington, DC.

PROSSER, C.L., and F.A. BROWN. 1961. Comparative animal physiology. 2nd ed. W.B. Saunders, Philadelphia, PA. 688 p.

PROTHERO, J.W. 1980. Scaling of blood parameters in mammals. Comp. Biochem. Physiol. 67A: 649-658.

PROVANCHA, J.A., E. ASPER, and D. O'DELL. 1982. Capture marking and resighting of free ranging Tursiops truncatus in the Indian River lagoon system, Florida. Fla Sci. 45(suppl. 1): 28.

PUETT, D., E. FRIEBELE, and R.G. HAMMONDS. 1973. A comparison of the conformational stabilities of homologous hemoproteins: myoglobins from several species, human hemoglobin and subunits. Biochim. Biophys. Acta 328: 261-277.

PUGH, L.G.C.E. 1959. Carbon monoxide content of the blood and other observations on Weddell seals. Nature (Lond.) 183: 74-76.

PUGSLEY, L.I., and K.F. HARDING. 1938. Note on the oils from the hair seal and sea lion. Fish Res. Board Can. Pac. Biol. Stn Prog. Rep. 36: 10-11.

PUPPIONE, D.L. 1969. Physical and chemical characterization of the serum lipoproteins of marine mammals. Ph.D. Thesis, University of California, Berkeley, CA. (Lawrence Radiation Laboratory, AEC Contract No. U-7405-ENG48, UCRL18821)

PUPPIONE, D.L. 1978. Serum lipoproteins in two species of phocids, Phoca vitulina and Mirounga angustirostris, during alimentary lipemia. Comp. Biochem. Physiol. 59A: 127-132.

PUPPIONE, D.L., and E.L. COGGIOLA. 1966. Serum lipoprotein distribution in certain aquatic mammals, p. 34-40. In C.E. Rice (ed.) Symposium: biological sonar and diving mammals, Proceedings of the 3rd annual conference on biological sonar and diving mammals, 23-26 May, 1966. Stanford Research Institute, Biological Sonar Laboratory, Fremont, CA.

PUPPIONE, D.L., T. FORTE, and A.V. NICHOLS. 1971. Serum lipoproteins of killer whales. Comp. Biochem. Physiol. 39B: 673-681.

PUPPIONE, D.L., G.M. FORTE, A.V. NICHOLS, and E.H. STRISOWER. 1970. Partial characterization of serum lipoproteins in the density interval 1.04-1.06 G.M.L. Biochim. Biophys. Acta 202: 392-395.

PUPPIONE, D.L., and A.V. NICHOLS. 1970. Characterization of the chemical and physical properties of the serum lipoproteins of certain marine mammals. Physiol. Chem. Phys. 2: 49-58.

PURDIE. 1885. Note on the chemical composition of the milk of the porpoise. Chem. News 52: 170.

QUIST, J., R.E. WEBER, and W.M. ZAPOL. 1981. Oxygen equilibrium properties of blood and hemoglobin of fetal and adult Weddell seals. J. Appl. Physiol. Respir. Environ. Exercise Physiol. 50: 999-1005.

RACADOT, J. 1962. Comparison of several cell types of the anterior lobe of seal (Leptonychotes weddelli) pituitary with those of the sheep, particularly during gestation and lactation. Gen. Comp. Endocrinol. 2: 632.

RADOLA, B.J. 1968. Radiation-induced hybridation of proteins. Biochim. Biophys. Acta 160: 469-472.

RADUAN, A., and J.A. RAGA. 1982. Beachings of Stenella coeruleoalba on the coasts of the Valencia region, Spain. Mem. Mus. Mar. Ser. Zool. 2(18): 1-8. (In Spanish)

RAE, B.B. 1963. The food of grey seals, p. 28-33. In E.B. Worthington (ed.) Grey seals and fisheries. Report on the Consultative Commission on Grey Seals and Fish. H.M. Stationery Office, London.

RAE, B.B. 1968. The food of seals in Scottish waters. Mar. Res. Scotl. Dep. Agric. Fish. 2: 23 p.

RAE, B.B. 1973a. Additional notes on the food of the common porpoise, Phocoena phocoena. J. Zool. (Lond.) 163: 127-131.

RAE, B.B. 1973b. Further observations on the food of seals. J. Zool. (Lond.) 169: 287-297.

RAESIDE, J.I., and K. RONALD. 1981. Plasma concentrations of estrone, progesterone and adrenocorticoids during late pregnancy and after parturition of the harbour seal, Phoca vitulina. J. Reprod. Fertil. 61: 135-139.

RAGA, J.A., E. BARBONELL, and M.A. RADUAN. 1982. Incidence of parasites in stranded Cetaceae on the Spanish Mediterranean coasts. Mem. Mus. Mar. Ser. Zool. 2(19): 1-11. (In Spanish)

RAIE, M.Y. 1976. Location of ethylenic bonds in fatty alkanes compounds. Pak. J. Sci. Ind. Res. 19: 55-60.

RAKESTRAW, N.W., and R.E. SWAIN. 1923. The uric acid content of the blood of the Steller sea lion. Proc. Soc. Exp. Biol. Med. 21: 135-136.

RAMAEKERS, F.C.S., P.L.E. VAN KAN, and H. BLOEMENDAL. 1979. A comparative study of ß-crystallins from ungulates, whale and dog. Ophthalmic Res. 11: 143-153.

RAMAIAH, G.D. 1965. Chromatographic studies on quality and fatty acid composition of milk fats from different species. Ph.D. Thesis, Washington State University. (Diss. Abstr. 26: 304, 1966)

RAMPRASHAD, F., and K. RONALD. 1977. A surface preparation study on the effect of methyl mercury on the sensory hair cell population in the cochlea of the harp seal (Pagophilus groenlandicus Erxleben 1777). Can. J. Zool. 55: 223-230.

RAND, R.W. 1955. Reproduction in the female Cape fur seal, Arctocephalus pusillus. Proc. Zool. Soc. Lond. 124: 717-740.

RANKOV, G., and A. IOVCHEV. 1954. The yields and characteristics of the technical dolphin oil obtained from the blubber of Delphinus delphis L. depending on the duration of netting time. C. R. Acad. Bulg. Sci. 7: 49-52.

RANKOV, G., and A. IOVCHEV. 1955. The vitamin A content and characteristics of the oil obtained from the subcutaneous fat of Delphinus delphis under various rendering conditions. C. R. Acad. Bulg. Sci. 8: 41-44.

RAPPE, C., H.R. BUSER, D.L. STALLING, L.M. SMITH, and R.C. DOUGHERTY. 1981. Identification of polychlorinated dibenzofurans in environmental samples. Nature (Lond.) 292: 524-526.

RAY, C., and F.H. FAY. 1968. Influence of climate on the distribution of walruses, Odobenus rosmarus (Linnaeus). I. Evidence from physiological characteristics. Zoologica 53: 19-32.

RAY, C., and M.S.R. SMITH. 1968. Thermoregulation of the pup and adult Weddell seal, Leptonychotes weddelli (Lesson), in Antarctica. Zoologica 53: 33-46.

RAY, C.E., F. REINER, D.E. SERGEANT, and C.N. QUESADA. 1982. Notes on past and present distribution of the bearded seal, Erignathus barbatus, around north Atlantic Ocean. Mem. Mus. Mar. Ser. Zool. 2: 1-32.

RAY, G.C. 1970. Population ecology of Antarctic seals, p. 398-414. In M.W. Holdgate (ed.) Antarctic ecology. Academic Press, New York, NY.

RAY, G.C., E.E. MITCHELL, D. WARTZOK, V.M. KOZICKI, and R. MAIEFSKI. 1978. Radio tracking of a fin whale (Balaenoptera physalus). Science (Wash. DC) 202: 521-524.

RAY, G.C., and W.E. SCHEVILL. 1974. Feeding of a captive gray whale, Eschrichtius robustus. Mar. Fish. Rev. 36(4): 31-38.

RAYMONT, J.E.G. 1963. Plankton and productivity in the oceans. Macmillan, New York, NY.

RAZUMOVSKII, B.I. 1933. Vesenni zveroboinyi promysel (spring trapping). Dalgez, Kharbarovsk. (In Russian)

REEVES, R.H. 1978. Atlantic walrus (Odobenus rosmarus rosmarus): a literature survey and status report. U.S. Fish. Wildl. Serv. Wildl. Res. Rep. 10: 41 p.

REEVES, R.R. 1980. Spitzbergen bowhead stock: a short review. Mar. Fish. Rev. 42 (9-10): 65-69.

REICHENOW, A. 1839. Bericht ueber die Leistungen in der Naturgeschichte der Saeugethiere Waehrend des Jahres 1882. Arch. Naturgesch. 2: 385-408.

REICHERT, L.E. 1962. Proteinases of the pituitaries of several fish and of a whale. Gen. Comp. Endocrinol. 2: 283-285.

REID, W. 1976. The care and handling of leopard seals, Hydrurga leptonyx in captivity. Aquat. Mamm. 4: 60-66.

REIJNDERS, P.J.H. 1976. The harbour seal (Phoca vitulina) population in the Dutch Wadden Sea: size and composition. Neth. J. Sea Res. 10: 223-235.

REIJNDERS, P.J.H. 1979. Organochlorine and heavy metal residues in harbour seals of Schleswig Holstein plus Denmark and the Netherlands: their possible effects in relation to the reproduction in both populations. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1979/N:18.

REIJNDERS, P.J.H. 1980. Organochlorine and heavy metal residues in harbour seals from the Wadden Sea and their possible effects on reproduction. Neth. J. Sea Res. 14: 30-65.

REIJNDERS, P.J.H. 1982a. On the ecology of the harbour seal, Phoca vitulina, in the Wadden Sea: population dynamics residue levels and management. Tijdschr. Diergeneeskd. 107: 36-42.

REIJNDERS, P.J.H. 1982b. Diminishing fertility in seals in the Netherlands, possibly resulting from exposure to large amounts of polychlorinated biphenyls. Tijdschr. Diergeneeskd. 107: 363-367.

REIJNDERS, P.J.H., and W.J. WOLFF. (ed.) 1981. Marine mammals of the Wadden Sea, North Sea: final report of the section on marine mammals. A.A. Balkema, Rotterdam. 64 p. (Wadden Sea Working Group Report No. 7)

REILLY, S.B., D.W. RICE, and A.A. WOLMAN. 1983. Population assessment of the gray whale, Eschrichtius robustus, from California, U.S.A. shore censuses, 1967-1980. U.S. Natl Mar. Fish. Serv. Fish. Bull. 81: 267-282.

REINECK, M. 1962. A rearing of abandoned sucklings of Phoca vitulina. Int. Zoo Yearb. 4: 293-294.

REISH, D.J. 1976. Marine and estuarine pollution. J. Water Pollut. Control Fed. 48: 1439-1459.

REITER, R.J. 1974. Pineal regulation of hypothalamo pituitary axis gonadotropins, p. 519-550. In E. Knobil and W.H. Sawyer (ed.) Handbook of physiology, Sect. 7. Endocrinology, Vol. IV. The pituitary gland and its neuroendocrine control. Part 2. American Physiological Society, Washington, DC.

REITER, J., K.J. PANKEN, and B.J. LE BOEUF. 1981. Female competition and reproductive success in northern elephant seals. Anim. Behav. 29: 670-687.

REITER, J., N.L. STINSON, and B.J. LE BOEUF. 1978. Northern elephant seal development: the transition from weaning to nutritional independence. Behav. Ecol. Sociobiol. 3: 337-367.

RENBERG, L., G. SUNDSTROM, and L. REUTERGARDH. 1978. Polychlorinated terphenyls (PCT) in Swedish white-tailed eagles and in grey seals: a preliminary study. Chemosphere 7: 477-482.

REPENNING, C.A. 1975. Evolution of sea lions and walruses (Abstract). Am. Zool. 15: 8.

REPENNING, C.A. 1976. Adaptive evolution of sea lions and walruses. Syst. Zool. 25: 375-390.

REUTENAUER, G., and M. REGENT. 1948. A rapid determination of the iodine number of oils. Oléagineux 3: 379-383.

RENOUF, D., J. LAWSON, and L. GABORKO. 1983. Attachment between harbour seal (Phoca vitulina) mothers and pups. J. Zool. (Lond.) 199: 179-187.

REWELL, R.E., and R.A. WILLIS. 1949. Some tumours found in whales. J. Path. Bact. 61: 454-456.

REWELL, R.E., and R.A. WILLIS. 1950. Some tumours in wild animals. J. Path. Bact. 62: 450-453.

REYNOLDS, P.S., and D.M.LAVIGNE. 1981. Visible and ultraviolet reflectance characteristics of arctic homeotherms. Int. J. Biometeorol. 25: 299-308.

REZVOV, G.V. 1977. Feeding of the ringed seal and gray seal of the Baltic Sea. Rybn. Khoz. 53(7): 24-26. (In Russian)

RHODES, J.A. 1975. Biochemical profiles of exotic captive animals. Am. Assoc. Zoo Vet. Annu. Proc. 1975: 81-111.

RICE, D.W. 1968. Stomach contents and feeding behaviour of killer whales in the eastern north Pacific. Norsk. Hvalfangst-Tid. 57: 35-38.

RICE, D.W. 1972. First record of the giant sea-devil, Ceratias holboelli, from California, based upon a specimen from the stomach of a sperm whale. Bull. S. Calif. Acad. Sci. 71: 158.

RICE, D.W. 1974. Whales and whale research in the eastern north Pacific, p. 170-195. In W.E. Schevill (ed.) The whale problem: a status report. Harvard University Press, Cambridge, MA.

RICE, D.W. 1977. Synopsis of biological data on the sei whale and Bryde's whale in the eastern north Pacific. Int. Whaling Comm. Rep. Comm. 1: 92-97.

RICE, D.W. 1977a. A list of the marine mammals of the world. U.S. Natl Mar. Fish. Serv. Spec. Sci. Rep. Fish. 711: 15 p.

RICE, D.W. 1978. The gray whale, p. 55-61. In D. Haley (ed.) Marine mammals of eastern north Pacific and Arctic waters. Pacific Search Press, Seattle, WA.

RICE, D.W., and V.B. SCHEFFER. 1968. A list of marine mammals of the world. U.S. Fish Wildl. Serv. Spec. Sci. Rep. Fish. 579.

RICE, D.W., and A.A. WOLMAN. 1971. The life history and ecology of the gray whale, Eschrichtius robustus. Am. Soc. Mammal. Spec. Publ. 3: 1-142.

RIDEOUT, J.A., I.R. SMITH, and M.D. SUTHERLAND. 1976. Pigments of marine animals. Part 12. The synthesis of certain substituted naphthopyrones related to crinoid pigments. Aust. J. Chem. 19: 1087-1098.

RIDGWAY, S.H. 1965. Medical care of marine mammals. J. Am. Vet. Med. Assoc. 147: 1077-1085.

RIDGWAY, S.H. 1968. The bottlenose dolphin in biomedical experimentation, p. 387-446. In W.I. Gay (ed.) Methods of animal experimentation. Vol. III. Academic Press, New York, NY.

RIDGWAY, S.H. 1970. Veterinarian and marine research. J. Am. Vet. Med. Assoc. 156: 1243.

RIDGWAY, S.H. 1972. Homeostasis in the aquatic environment, p. 590-747. In S.H. Ridgway (ed.) Mammals of the sea: biology and medicine. C.C. Thomas, Springfield, IL.

RIDGWAY, S.H. (ed.) 1972a. Mammals of the sea: biology and medicine. C.C. Thomas, Springfield, IL. 812 p.

RIDGWAY, S.H. 1976. Diving mammals and biomedical research. Oceanus 19: 49-55.

RIDGWAY, S.H. 1979. Reported causes of death of captive killer whales (Orcinus orca). J. Wildl. Dis. 15: 99-104.

RIDGWAY, S.H., and W.F. FLANIGAN. 1981. An investigation of a potential method for the humane taking of certain whales and seals used for food. U.S. Mar. Mamm. Comm., Washington, DC., Final Rep. Contract No. MM6AC030. U.S. Government Printing Office, Washington DC. (Available from NTIS as PB81-161101: 12 p.)

RIDGWAY, S.H., J.R. GERACI, and W. MEDWAY. 1975. Disease of pinnipeds. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 327-337.

RIDGWAY, S.H., and R. GREEN. 1967. Evidence for a sexual rhythm in male porpoises Lagenorhynchus obliquidens and Delphinus delphis bairdi. Norsk Hvalfangst Tid. 1: 1-8.

RIDGWAY, S.H., and R.J. HARRISON (ed.) 1981. Handbook of marine mammals. Vol. 1. The walrus, sea lions, fur seals and sea otter. Academic Press, New York, NY. xiv + 235 p.

RIDGWAY, S.H., and R.J. HARRISON (ed.) 1981a. Handbook of marine mammals. Vol. 2. Seals. Academic Press, New York, NY. xv + 359 p.

RIDGWAY, S.H., and R. HOWARD. 1979. Dolphin lung collapse and intramuscular circulation during free diving: evidence from nitrogen washout. Science (Wash. DC) 200: 1182-1183.

RIDGWAY, S.H., and D.G. JOHNSTON. 1966. Blood oxygen and ecology of porpoises of three genera. Science (Wash. DC) 151: 456-458.

RIDGWAY, S.H., and J.G. McCORMICK. 1967a. Anesthesia for major surgery in porpoises. Science (Wash. DC) 158: 510-512.

RIDGWAY, S.H., and J.G. McCORMICK. 1967b. Anesthesia for surgery in porpoises, 16 mm color sound film (20 min.). Presented at the April 1967, Eastern Psychological Association Annual Meeting and 1968 American Psychological Association Meeting. (Available through N.I.H. Film Library)

RIDGWAY, S.H., and J.G. McCORMICK. 1971. Anesthesia of the porpoise, p. 394403. In L.R. Soma (ed.) Textbook of veterinary anesthesia. Williams and Wilkins, Baltimore, MD.

RIDGWAY, S.H., B.L. SCRONCE, and J. KANWISHES. 1969. Respiration and deep diving in the bottlenose porpoise. Science (Wash. DC) 166: 1651-1654.

RIDGWAY, S.H., and J.G. SIMPSON. 1969. Anesthesia and restraint for the California sea lion. J. Am. Vet. Med. Assoc. 155: 1059-1063.

RIDGWAY, S.H., J.G. SIMPSON, and G.S. PATTON. 1969. Chemical and physical characteristics of porpoise blood, p. 97-122. In D.K. Caldwell (ed.) Proceedings of the symposium on diseases and husbandry of aquatic mammals, 2nd 1968. Marineland Research Laboratory, St. Augustine, FL.

RIDGWAY, S.H., J.G. SIMPSON, W.G. GILMARTIN, and G.S. PATTON. 1970. Hematologic findings in some small cetaceans. J. Am. Vet. Med. Assoc. 157: 566-575.

RIDLINGTON, J.W., D.C. CHAPMAN, D.E. GOEGER, and P.D. WHANGER. 1981. Metallothionein and copper chelation: characterization of metal-binding proteins from tissues of four marine animals. Comp. Biochem. Physiol. 70B: 93-104.

RIEDMAN, M., and C.L. ORTIZ. 1979. Changes in milk composition during lactation in the northern elephant seal. Physiol. Zool. 52: 240-249.

RIEU, M., and B. GAUTHERON. 1968. Preliminary observations concerning a method for introduction of a tube for anesthesia in small dolphinids. Life Sci. Biochem. Gen. Mol. Biol. 7(22 Part 1): 1141-1146.

RIGDON, R.H., and G.A. DRAGER. 1955. Thiamine deficiency in sea lion (Otaria californianus) fed only frozen fish. J. Am. Vet. Med. Assoc. 127: 453-455.

RIOU, L. 1947a. Chemical and physical characteristics of seal oil. Append. No. 19. In Fish Res. Board Can. Gaspe Fish. Exp. Stn Annu. Rep. 1947.

RIOU, L. 1947b. Residue after rendering. Append. No. 22. In Fish Res. Board Can. Gaspe Fish. Exp. Stn Annu. Rep. 1947.

RISEBROUGH, R.W. 1978. Pollutants in marine mammals. A literature review and recommendations for research. U.S. Mar. Mamm., Wash., DC., Final Rep. Contract No. MM7AD035. U.S. Government Printing Office, Washington, DC. (Available from NTIS as PB-290728: 64 p.)

RISEBROUGH, R.W., W. WALKER II, T.T. SCHMIDT, B.W. DE LAPPE, and C.W. CONNORS. 1976. Transfer of chlorinated biphenyls to Antarctica. Nature (Lond.) 264: 738-739.

RIVIERE, J.E. 1978. Molting in the harbor seal, Phoca vitulina, and its possible significance to exotic animal medicine. J. Zoo Anim. Med. 9(2): 46-52.

RIVIERE, J.E., F.R. ENGELHARDT, and J. SOLOMON. 1977. The relationship of thyroxine and cortisol to the moult of the harbour seal, Phoca vitulina. Gen. Comp. Endocrinol. 31: 298-301.

ROBERGE, A., and R. CHARBONNEAU. 1971. Activities of urea cycle enzymes in the liver of brown bear. Comp. Biochem. Physiol. 358: 295-298.

ROBERTS, J.C., R.C. BOICE, D.H. BROWN, and R.L. BROWNELL. 1964. Atherosclerosis in whales. Circulation 30(Suppl. 3): 111-125.

ROBERTS, J.C., R.C. BOICE, R.L. BROWNELL, and D.H. BROWN. 1965. Spontaneous atherosclerosis in Pacific toothed and baleen whales, p. 151-155. In J.C. Roberts and R. Straus (ed.) Comparative atherosclerosis. Harper and Row, New York, NY.

ROBERTS, J.C., D.H. BROWN, and R.C. BOICE. 1963. Arteriosclerosis in whales and dolphins. Circulation 28:(4 Pt. 2): 670.

ROBERTS, T.M., P.B. HELLPLESTON, and R.D. ROBERTS. 1976. Distribution of heavy metals in tissues of the common seal. Mar. Pollut. Bull. 7: 194-196.

ROBIN, E.D. 1966. Of seals and mitochondria. N. Engl. J. Med. 275: 646-652.

ROBIN, E.D., M. CALIGIURI, A.J. HANCE, D.A. ROBIN, N. LEWISTON, and J. THEODORE. 1980. Depressed energy and oxygen requirements - mechanism for survival during prolonged and profound oxygen depletion (Abstract). Clin. Res. 28(2): 559A.

ROBIN, E.D., J. ENSINCK, A.J. HANCE, A. NEWMAN, N. LEWISTON, L. CORNELL, R.W. RANDALL, and J. THEODORE. 1981. Glucoregulation and simulated diving in the harbour seal, Phoca vitulina. Am. J. Physiol. 241: R293-R300.

ROBIN, E.D., H.V MURDAUGH, C.E. CROSS, J. SMITH, and J. THEODORE. 1971. Cation transport and energy metabolism in high sodium, low potassium erythrocyte of harbour seal, Phoca vitulina. Comp. Biochem. Physiol. 39A: 807-821.

ROBIN, E.D., H.V. MURDAUGH, J.E. MILLEN, and C.D. HEARN. 1965. Energy exchange during diving in the seal, Phoca vitulina. Bull. Mt Desert Isl. Biol. Lab. 5: 66.

ROBIN, E.D., L.M. SIMON, and J. THEODORE. 1970. Biochemical adaptations subserving prolonged diving in aquatic mammals, p. 105-114. In Symposium: biological sonar and diving mammals, Proceedings of the 7th annual conference on biological sonar and diving mammals, 23-24 October 1970, Stanford Research Institute, Biological Sonar Laboratory, Menlo Park, CA.

ROBIN, E.D., J. SMITH, and H.V. MURDAUGH. 1968. Energy metabolism in the erythrocyte of the seal (Phoca vitulina). Bull. Mt Desert Isl. Biol. Lab. 8: 59-60.

ROBINEAU, D., and J.-M. ROSE. 1983. Note on Stenella longirostris, Cetacea, Delphinidae, of the Gulf of Aden waters of Djiboti. Mammalia 47: 237-246.

ROBINSON, A.J., M. KROPATKIN, and P.M. AGGELER. 1969. Hagemann Factor (Factor 12) deficiency in marine mammals. Science (Wash. DC) 166: 14201422.

ROBISCH, P.A., D.C. MALINS, R. BEST, and U. VARANASI. 1972. Differences in triacylglycerols from acoustic tissues and posterior cranial blubber of the narwhal (Monodon monoceros). Biochem. J. 130: 33P-34P.

ROBISON, B.H., and J.E. CRADCOCK. 1983. Mesopelagic fishes eaten by Fraser's dolphin, Lagenodelphis hosei. U.S. Natl Mar. Fish. Serv. Fish. Bull. 81: 283-290.

ROBSON, D.S. 1966. Visual orientation and feeding in seals and sea lions. Nature (Lond.) 210: 326-327.

ROCHON-DUVIGNEAUD, A. 1940. L'oeil des cetaces. Arch. Mus. Natl Hist. Nat. (Paris) Ser. 6, 16: 59-90, Pl. 5-12.

RODAHL, K. 1949a. The toxic effect of polar bear liver. Nor. Polarinst. Skr. 92.

RODAHL, K. 1949b. Vitamin resources in Arctic region. Nor. Polarinst. Skr. 91: 1-64.

RODAHL, K., and A.W. DAVIES. 1949. Vitamin A in seals. Biochem. J. 45: 408-412.

RODAHL, K., and T. MOORE. 1943. The vitamin A content and toxicity of bear and seal liver. J. Biochem. 37: 166-168.

ROE, H.S.J. 1969. The food and feeding habits of the sperm whales, Physeter catodon, taken off the west coast of Iceland. J.

Cons. Cons. Perm. Int. Explor. Mer 33: 93-102.

ROFF, D.A., and W.D. BOWEN. 1983. Population dynamics and management of the northwest Atlantic harp seal, Phoca groenlandica. Can. J. Fish. Aquat. Sci. 40: 919-932.

ROMERO-HERRERA, A.E., H. LEHMANN, K.A. JOYSEY, and A.E. FRIDAY. 1973. Molecular evolution of myoglobin and fossil record: a phylogenetic synthesis. Nature (Lond.) 246: 389-395.

RONALD, K. 1967. Physical blood properties of the harp seal (Phoca groenlandica) aged 1-12 months. In Symposium: biological sonar and diving mammals, Proceedings of the 4th annual conference on biological sonar and diving mammals. Stanford Research Institute, Stanford, CA.

RONALD, K. 1970. Physical blood properties of neonatal and mature harp seals. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1970/N:5.

RONALD, K. 1975. The toxicity of methyl mercury to the harp seal. Can. Fish. Mar. Serv. Environ. Can. Halifax Lab. Rep.

RONALD, K., M.E. FOSTER, and E. JOHNSON. 1969. Harp seal, Pagophilus groenlandicus. II. Physical blood properties. Can. J. Zool. 47: 461-468.

RONALD, K., L.M. HANLEY, P.J. HEALEY, and L.J. SELLEY. 1976. An annotated bibliography on the Pinnipedia. International Council for the Exploration of the Sea, Charlottenlund, Denmark. 785 p.

RONALD, K., P.J. HEALEY, J. DOUGAN, L.J. SELLEY, and L. DUNN. 1983. An annotated bibliography on the Pinnipedia. Supplement I. International Council for the Exploration of the Sea, Copenhagen, Denmark. 346 p.

RONALD, K., E. JOHNSON, M.E. FOSTER, and D. VANDER POL. 1970. The harp seal, Pagophilus groenlandicus (Erxleben, 1777). I. Methods of handling, molt and disease in captivity. Can. J. Zool. 48: 1035-1040.

RONALD, K., and J. KAY. 1982. Haematology and plasma chemistry of captive Baikal seals, Pusa sibirica. Aquat. Mamm. 9: 83-84.

RONALD, K., and S.V. TESSARO. 1976. Methymercury poisoning in the harp seal (Pagophilus groenlandicus). Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1976/N:8.

RONALD, K., S.V. TESSARO, and J.F. UTHE. 1977. Methylmercury poisoning in the harp seal (Pagophilus groenlandicus). Sci. Total Environ. 8: 1-11.

RONALD, K., J.F. UTHE, and H.C. FREEMAN. 1975. Effects of methyl mercury on the harp seal. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1975/N:9.

RORVIK, C.J., J. JONSSON, O.A. MATHISEN, and A. JONSGARD. 1976. Fin whales, Balaenoptera physalus, off the west coast of Iceland distribution, segregation by length and exploitation. Rit Fiskideildar 5: 1-30.

ROS DE URSINOS, J.A.F., A.V. RONCERO, L.A. LOPEZ, and J.M.M. MORENO. 1953. Crystalline urea complexes with fatty materials. V. Separation of the components of cachalot oil by means of these complexes. An. R. Soc. Espan. Fis. Quim. 49B: 645-648.

ROSEWELL, K.T., and B.E. BAKER. 1979. A method for confirming organochlorine pesticide residues in wildlife. Bull. Environ. Contam. Toxicol. 21: 470-477.

ROSEWELL, K.T., D.C.G. MUIR, and B.E. BAKER. 1979. Organochlorine residues in harp seal, Pagophilus groenlandicus, tissues. Gulf of St. Lawrence, 1971, 1973. Pestic. Monit. J. 12: 189-192.

ROSS, G.J.B. 1979. Records of pygmy and dwarf sperm whales genus Kogia from South Africa with biological notes and some comparisons. Ann. Cape Prov. Mus. Nat. Hist. 11: 259-327.

ROSS, W.G. 1974. Distribution, migration and depletion to bowhead whales in Hudson Bay, 1860-1915. Arct. Alp. Res. 6: 85-98.

ROTHGEB, T.M., and F.R.N. GURD. 1978. Physical methods for the study of myoglobin. Methods Enzymol. 52: 473-486.

ROUZET, J. 1969. Identification and determination of unsaponifiable matter in shark and sperm whale oils and lanolins. Rev. Asoc. Argent. Quim. Tec. Ind. Cuero 10: 65-69.

RUDOLPH, W. 1949. The utilization of raw materials from the sea. Natur u. Nahrung 3: 1-2.

RUGH, D.J., and H.W. BRAHAM. 1979. California gray whale (Eschrichtius robustus) fall migration through Unimak Pass, Alaska, 1977: a preliminary report. Int. Whaling Comm. Rep. Comm. 29: 315-320.

RUMEN, N.M. 1959. Isolation of five myoglobins from seal (Phoca vitulina). Acta Chem. Scand. 13: 1542-1546.

RUMEN, N.M. 1960. Amino acid composition of seed myoglobin I. Acta Chem. Scand. 14: 1217-1218.

RUMEN, N.M., and E. APELLA. 1962. Molecular association behaviour of apomyoglobins from the seal (Phoca vitulina). Arch. Biochem. Biophys. 97: 128-133.

RUSSELL, P.C. 1969. Elephant seal are not dying from offshore oil leak. Oceanol. Int. 4: 43.

RUSSELL, R.H. 1975. The food habits of polar bears of James Bay and southwest Hudson

Bay, Canada, in summer and autumn. Arctic 28: 117-129.

RUZIC, I.M., T.D. SMITH, and J.R. PILBROW. 1982. An ESR study of molecular oxygen adducts of the apomyoglobin complexes of cobalt II protoporphrin IX and cobalt II 3,10,17,24-tetrasulfonated phthalocyanine. J. Chem. Soc. Dalton Trans. (2): 373-350.

RYDING, F.N. 1982. Ketamine immobilization of southern elephant seals, Mirounga angustirostris, by a remote injection method. Br. Antarct. Surv. Bull. 57: 21-26.

RZHAVSKAYA, F.M., and M.A. ALEKSEEVA. 1966. Determination of unsaponifiable substances in fat of fish and sea mammals. Rybn. Khoz. 42(4): 66-67. (In Russian)

RZHAVSKAYA, F.M., and T.A. DUBROVSKAYA. 1973. Determination of polyunsaturated lipid acids of marine organisms. Ryb. Khoz. (4): 71-73. (In Russian)

RZHAVSKAYA, F.M., T.G. KLIMOVA, and T.A. DUBROVSKAYA. 1977. Characteristics of oxidation of fats of diverse nature in storage. Vopr. Pitan. 3: 79-84. (In Russian)

RZHAVSKAYA, F.M., and A.M. MAKAROVA. 1974. Action of unsaponfiable substances of hepatic lipids of the codfish and whale on separation of a mixture of methyl esters of fatty acids by gas-liquid chromatography. Tr. Vses. Nauchno-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr. 95: 120-124. (In Russian)

RZHAVSKAYA, F.M., and K.A. MROCHKOV. 1967. Characteristics of edible whale fats obtained from different parts of the whale body. Tr. Vses. Nauchno-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr. 63: 9-24. (In Russian)

RZHEKHIN, V.P., and N.I. POGONKINA. 1966. Determination of fatty acids in whale fat by distributive chromatography. Tr. Vses. Nauchno-Issled. Inst. Zhirov 25: 309-311. (In Russian)

SAAYMAN, G.S., D. BOWER, and C.K. TAYLOR. 1972. Observations on inshore and pelagic dolphins on the southeastern Cape coast of South Africa. Koedoe 15: 1-24.

SAAYMAN, G.S., C.K. TAYLOR, and D. BOWER. 1973. Diurnal activity cycles in captive and free ranging Indian Ocean bottlenosed dolphins, Tursiops aduncus. Behaviour 44: 212-233.

SABASHNIKOVA, G.S., I.P. KOVALENKO, and L.P. NOVOSEL'SKAYA. 1972. Obtaining insulin from the adrenal glands of whales. Tr. Ukr. Nauchno-Issled. Inst. Myasn. Molochn. Prom.-sti. 2(1): 85-90. (In Russian)

SABASI, K., A. NAKAYAMA, S. HIRAO, and T. KINUMAKI. 1950. The biological potency of vitamin A in whale liver oil and its molecular distillates. Bull. Jpn. Soc. Sci. Fish. 16: 46-52.

SACHER, G.A. 1974. Relation of gestation time to brain weight for placental mammals: implications for the theory of vertebrate growth. Am. Nat. 108: 593-615.

SACHITANANTHAN, C., and Y. HIYAMA. 1965. Gamma-emitters in marine organisms. I. Concentration of gamma-emitting nuclides in the fin whale. J. Radiat. Res. 6: 141-147.

SAIKI, M. 1953a. Whale oil. VIII. Fatty acid composition of the Pacific beaked whale oil. 2. Blubber oil. Bull. Jpn. Soc. Sci. Fish. 19: 809-812.

SAIKI, M. 1953b. Whale oil. IX. Fatty acid composition of the Pacific beaked whale (Berardius bairdii) oil. 3. The visceral oil. Bull. Jpn. Soc. Sci. Fish. 19: 1028-1031.

SAIKI, M. 1954a. Whale oil. X. Fatty acid composition of the Pacific beaked whale (Berardius bairdii) oil. 4. The liver lipid. Bull. Jpn. Soc. Sci. Fish. 20: 396-400.

SAIKI, M. 1954b. Whale oil. XI. Molecular distillation of the Pacific beaked whale (Berardius bairdii) liver oil. Bull. Jpn. Soc. Sci. Fish. 20: 401-405.

SAIKI, M., and T. MORI. 1952. Whale oil. IV. Properties of oils contained in various parts of the whale body. 4. Bottlenose whale. Bull. Jpn. Soc. Sci. Fish. 18: 269-272.

SAIKI, M., and T. MORI. 1953a. Whale oil. V. The fatty acid composition of sperm whale oil. 1. The head cavity oil. Nippon Nogeikagaku Kaishi 27: 188-190.

SAIKI, M., and T. MORI. 1953b. Whale oil. VI. The fatty acid composition of sperm whale oil. 2. The bone oil and the large intestine. Nippon Nogeikagaku Kaishi 27: 190-193.

SAIKI, M., and T. MORI. 1953c. Whale oil. VII. Fatty acid composition of the bottle-nose whale oil. 1. The head and jaw oils. Bull. Jpn. Soc. Sci. Fish. 18: 497-501.

SAIKI, M., and T. MORI. 1953d. Whale oil. I. Properties of oils contained in various parts of whale body. 1. The sei whale and fin whale. Bull. Jpn. Soc. Sci. Fish. 19: 611-613.

SAIKI, M., and T. MORI. 1953e. Whale oil II. Properties of oil contained in various parts of a whale body. 2. The sperm whale. Bull. Jpn. Soc. Sci. Fish. 19: 614-618.

SAIKI, M., and T. MORI. 1953f. Whale oil. III. Properties of oils contained in various parts of a whale body. 3. The fetus

of the sperm whale. Bull. Jpn. Soc. Sci. Fish. 19: 619-621.

SAIKI, M., and T. MORI. 1956. Whale oil. XII. The lipid from Calanus cristatus. I. Fatty acid composition of oil from Calanus critatus collected in the stomach of the fin whale caught in the northern Pacific Ocean. Bull. Jpn. Soc. Sci. Fish. 21: 1041-1044.

SAIKI, M., S. FANG, and T. MORI. 1958. Whale oil. XIII. The composition of fatty alcohols in Berardius bairdii blubber oil. Bull. Jpn. Soc. Sci. Fish. 24: 578-580.

SAITO, H., G. GOLDSMITH, and O.D. RATNOFF. 1974. Fletcher factor activity in plasma of various species. Proc. Soc. Exp. Biol. Med. 147: 519-523.

SAITO, H., G. GOLDSMITH, and R. WALDMANN. 1976. Fitzgerald factor high molecular weight kininogen clotting acti[illegible] in human plasma in health and disease in various animal plasma. Blood [illegible]-947.

SAITO, K., and A. YOKOYAMA. 1954. [illegible]ulin of marine mammals. IV. The Langerhans' islets and extraction method. Bull. Jpn. Soc. Sci. Fish. 20: 621-624.

SAITO, T., and Y. ISHIHARA. 1956a. Crystalline whale pepsin. I. Isolation and purification. Nippon Nogeikagaku Kaisha 30: 426-431.

SAITO, T., and Y. ISHIHARA. 1956b. Crystalline whale pepsin. II. Solubility curve, elementary composition, optimum pH and stability. Bull. Fac. Fish. Hokkaido Univ. 7: 147-158.

SAITO, T., Y. ISHIHARA, and Y. ITO. 1957a Studies on crystalline whale pepsin. III. Analysis of amino acids by paper chromatography. Bull. Fac. Fish. Hokkaido Univ. 8: 220-223.

SAITO, T., Y. ISHIHARA, and Y. ITO. 1957b. Studies on crystalline whale pepsin. IV. Free amino acids in peptic digests of various proteins. Bull. Fac. Fish. Hokkaido Univ. 8: 224-232.

SALTER, R.E. 1979. Site utilization activity budgets and disturbance responses of Atlantic walruses, Odobenus rosmarus, during terrestrial haul-out. Can. J. Zool. 57: 1169-1180.

SAMUELS, E.R., M. CAWTHORN, B.H. LAUER, and B.E. BAKER. 1970. Strontium-90 and cesium-137 levels in tissues of fin whale (Balaenoptera physalus) and harp seal (Pagophilus groenlandicus). Can. J. Zool. 48: 267-269.

SANFORD, F.B., K.W. KENYON, and V.B. SCHEFFER. 1949. Vitamin A in liver of the Alaska fur seal. Commer. Fish Rev. 11(4): 9-15.

SANGALANG, G.B., and H.C. FREEMAN. 1976. Steroids in the plasma of the gray seal, Halichoerus grypus. Gen. Comp. Endocrinol. 29: 419-422.

SANO, Y. 1966a. Studies on Antarctic whale oils by gas-liquid chromatography by using a hydrogen flame ionization detector. III. Analysis of the fatty acids from fin whale blubber oil. Yukagaku 15: 99-108.

SANO, Y. 1966b. Studies on Antarctic whale oils by gas-liquid chromatography with a hydrogen flame ionization detector. IV. Analysis of the branchedchain fatty acids from blue whale bone oil. Yukagaku 15: 140-147.

SANO, Y. 1966c. Studies of whale oils by gas-liquid chromatography with a hydrogen flame-ionization detector. V. Identification of 3,7,11,15-tetramethylhexadecanoic acid as a constituent of whale oil. Yukagaku 15: 456-460.

SANO, Y. 1967a. Studies on Antarctic whale oils by gas-liquid chromatography using hydrogen flame ionization detector. VII. Identification of 4,8,12-trimethyltridecanoic acid as a constituent of whale oil. Yukagaku 16: 56-61.

SANO, Y. 1967b. Studies on Antarctic whale oils by gas-liquid chromatography using a hydrogen flame ionization detector. VIII. 7-Methyl-6-hexadecenoic acid in fin whale blubber oil. Yukagaku 16: 605-610.

SANO, Y. 1967c. Studies on the Antarctic whale oils by gas-liquid chromatography using a hydrogen flame ionization detector - VI. 2,6,10,14-tetramethylpentadecanoic acid in whale oil. Yukagaku 16: 8-12.

SANO, Y. 1968. Minor constituents of whale oils. II. Polyunsaturated fatty acids and alcohols in sperm blubber oil. Bull. Jpn. Soc. Sci. Fish. 34: 734-739.

SANO, Y., D. AIKAWA, and K. MURASE. 1965. Studies on the Antarctic whale oils by gas-liquid chromatography using a hydrogen flame ionization dector. II. Fatty acid composition of finwhale, blue whale and sei whale oils. Yukugaku 14: 171-178.

SANO, Y., and K. MURASE. 1965. Studies on Antarctic whale oils by gas-liquid chromatography by using a hydrogen flame ionization detector. I. Analysis of the fatty acids from sei whale blubber oil. Yukagaku 14: 104-112.

SARICH, V.M. 1969a. Pinniped origins and the rate of evolution of carnivore albumins. Syst. Zool. 18: 286-295.

SARICH, V.M. 1969b. Pinniped phylogeny. Syst. Zool. 18: 416-422.

SARICH, V.M. 1972. Nonidentity of several carnivore hemoglobins. Biochem. Genet. 7: 253-258.

SARICH, V.M. 1975. Pinniped systematics. Immunological comparisons of their albu-

mins and transferrins (Abstract). Am. Zool. 15: 826.

SASANO, Y., and K. HIGASHI. 1958. Chromatographic assay method for determining insulin in whale pancreas extracts. Yakugaku Zassni 78: 424-427.

SASANO, Y., and M. OTA. 1964. Utilization of the enzymes from whale pancreas. I. The proteolytic enzymes. Bull. Jpn. Soc. Sci. Fish. 30: 424-429.

SASANO, Y., and T. YOSHIWARA. 1965. Utilization of whale pancreas enzymes. II. Pretolytic enzymes. Bull. Jpn. Soc. Sci. Fish. 31: 669-672.

SASCHENBRECHER, P.W. 1973. Levels of DDT and PCB compounds in north Atlantic finback whales. Can. J. Comp. Med. 37: 203-206.

SATO, K., M. MATSUI, and N. IKEKAWA. 1967. Gas chromatography of triglycerides. Bunseki Kagaku 16: 1160-1165. (In Japanese)

SATO, Y., and Y. TSUCHIYA. 1977a. Metabolism of sperm oil in rats. I. Seborrhea in rats produced by sperm and cottonseed oil. Bull. Jpn. Soc. Sci. Fish. 43: 1123-1128.

SATO, Y., and Y. TSUCHIYA. 1977b. Metabolism of sperm oil in rats. 2. Seborrhea caused by waxes with different carbon atom chains. Bull. Jpn. Soc. Sci. Fish. 43: 1129-1132.

SAWYER-STAFFAN, J.E. 1983. Progesterone and estrogens in the pregnant and non pregnant dolphin, Tursiops truncatus and the effects of induced ovulation. Biol. Reprod. 28: 897-901.

SAWYER-STAFFAN, J.E., and V.L. KIRBY. 1980. A study of serum steroid hormone levels in captive female bottlenose dolphins, their correlation with reproductive status and their application to ovulation induction in captivity. Report 1980, MMC-77/32. U.S. Government Printing Office, Washington, DC. (Available from NTIS as PB80-177199; 28 p.) (Gov. Rep. Announce. 1980, 80(17): 3284)

SCAMMON, C.M. 1874. The marine mammals of the northwestern coast of North America together with an account of the American whale-fishery. J.H. Carmany and Sons, San Francisco, CA. 324 p.

SCHEFFER, V.B. 1950. The food of the Alaska fur seal. U.S. Fish Wildl. Serv. Wildl. Leafl. 329.

SCHEFFER, V.B. 1950a. Growth layers on the teeth of Pinnipedia as an indication of age. Science (Wash. DC) 112: 309-311.

SCHEFFER, V.B. 1952. Outline for ecological life history studies of marine mammals. Ecology 33: 287-296.

SCHEFFER, V.B. 1958. Seals, sea lions and walruses. Stanford University Press, Stanford, CA.

SCHEFFER, V.B., N.L. KARRICK, and F.B. SANFORD. 1950. Vitamin A in selected pale-colored livers of Alaska fur seals, 1948. U.S. Fish. Wildl. Serv. Spec. Sci. Rep. Fish. Sci. 32: 9 p.

SCHEFFER, V.B., and J.A. NEFF. 1948. Food of California sea lions. J. Mammal. 29: 67-68.

SCHEFFER, V.B., and J.W. SLIPP. 1944. The harbour seal in Washington State. Am. Midl. Nat. 82: 373-416.

SCHENKKAN, E.J., and P.E. PURVES. 1973. The comparative anatomy of the nasal tract and the function of the spermaceti organ in the Physeteridae (Mammalia, Odontoceti). Bijdragen Tot de Dierkunde 43: 93-112.

SCHEVILL, W.E., G.C. RAY, K.W. KENYON, R.T. ORR, and R.G. VAN GELDER. 1967. Immobilizing drugs lethal to swimming mammals. Science (Wash. DC) 157: 630-631.

SCHMIDLY, D.J., and MELCHER, B.A. 1974. Annotated checklist and key to the cetaceans of Texas waters. Southwest. Nat. 18: 453-464.

SCHMIDT, D.V., L.E. WALKER, and K.E. EBNER. 1971. Lactose synthetase activity in northern fur seal milk. Biochim. Biophys. Acta 252: 439-442.

SCHMIDT, P.J. 1950. Assay of vitamin A in British Columbia whale liver oils. Fish. Res. Board Can. Prog. Rep. Pacif. Co. Stn 83: 28-29.

SCHMIDT-NIELSEN, B., H.V. MURDAUGH, R. ODELL, and J. BACSANYI. 1959. Urea excretion and diving in the seal (Phoca vitulina L.). J. Cell. Comp. Physiol. 53: 393-411.

SCHMIDT-NIELSEN, K. 1979. Animal physiology: adaptation and environment. Cambridge University Press, Cambridge.

SCHMIDT-NIELSEN, S., and A. FLOOD. 1933. Die Ole and Trane einiger Bartenwale. Die Analysenkonstante der Fette einiger marinen Tiere. II. K. Nor. Vidensk. Selsk. Forh. 6: 115-130.

SCHMIDT-NIELSEN, S., and F. FROG. 1933. On the composition of the fat from a sample of whale milk. K. Nor. Vidensk. Selsk. Forh. 6: 127-129.

SCHMIDT-NIELSEN, S., and A. JOHANSEN. 1932. Sur la composition de l'urine des baleines II. Note supplementaire. K. Nor. Vidensk. Selsk. Forh. 4: 121-123.

SCHMIDT-NIELSEN, S., N.A. SORENSEN, and B. TRUMPY. 1933. Ein rotgefarbtes Walol Lipochrome in den Fetten Mariner Tiere. II. K. Nor. Vidensk. Selsk. Forh. 5: 118-121.

SCHMITZ, H.E., H. ATASSI, and M.Z. ATASSI. 1982. Production of monoclonal antibodies with preselected submolecular binding spe-

cificities to protein determinants demonstration with sperm whale myoglobin. Mol. Immunol. 19: 1699-1702.

SCHMITZ, H.E., H. ATASSI, and M.Z. ATASSI. 1983. Production of monoclonal antibodies to antigenic and nonantigenic protein regions using free synthetic peptides as immunogens (Abstract). Fed. Proc. 42(7): 1979A.

SCHMITZ, H.E., H. ATASSI, and M.Z. ATASSI. 1983a. Production of monoclonal antibodies to nonantigenic surface regions of a protein molecule using free synthetic peptides as immunogens demonstration with sperm whale myoglobin (Abstract). Fed. Proc. 42(7): 816A.

SCHMITZ, H.E., H. ATASSI, and M.Z. ATASSI. 1983b. Introduction of monoclonal antibodies to surface regions that are nonimmunogenic on a protein using free synthetic peptide as immunogens demonstration with sperm whale myoglobins. Immunol. Commun. 12: 161-176.

SCHMITZ, H.E., H. ATASSI, and M.Z. ATASSI. 1983c. Introduction of monoclonal antibodies with preselected submolecular binding specificities to protein antigenic sites antibodies and sperm whale myoglobin sites. Mol. Immunol. 20: 719-726.

SCHNEPPENHEIM, R. 1980. Concentration of fluoride in Antarctic animals. Meeresforschung 28(2/3): 179-182.

SCHOLANDER, P.F. 1940. Experimental investigations on the respiratory function in diving mammals and birds. Hvalradets Skr. 22: 1-131.

SCHOLANDER, P.F. 1962. Physiological adapatation to diving in animals and man. Harvey Lect. 57: 93-110.

SCHOLANDER, P.F. 1963. The master switch of life. Sci. Am. 209: 92-106.

SCHOLANDER, P.F. 1964. Animals in aquatic environments. Diving mammals and birds, p. 729-739. In D.B. Dill (ed.) Handbook of physiology. Sect. 4. Adaptation to the environment. Williams and Wilkins, Baltimore, MD.

SCHOLANDER, P.F., R. HOCK, V. WALTERS, and L. IRVING. 1950. Adaptation to cold in Arctic and tropical mammals and birds in relation to body temperature, insulation and basal metabolic rate. Biol. Bull. (Woods Hole) 99: 259-271.

SCHOLANDER, P.F., L. IRVING, and S.W. GRINNELL. 1942a. Aerobic and anaerobic changes in the seal muscles during diving. J. Biol. Chem. 142: 431-440.

SCHOLANDER, P.F., L. IRVING, and S.W. GRINNELL. 1942b. On the temperature and metabolism of the seal during diving. J. Cell. Comp. Physiol. 19: 67-78.

SCHOLANDER, P.F., and W.E. SCHEVILL. 1955. Counter current heat exchanger in the fins of whales. J. Appl. Physiol. 8: 279- .

SCHOLANDER, P.F., V. WALTERS, R. HOCK, and L. IRVING. 1950a. Body insulation of some Arctic and tropical mammals and birds. Biol. Bull. (Woods Hole) 99: 225-236.

SCHOLANDER, S.I. 1965. A bibliography of the published writings of P.F. Scholander. Hvalradets Skr. 48: 4-14.

SCHREIBER, G. 1976. Contribution of marine animals to cytologic studies. An. Acad. Bras. Cienc. 47: 105-108.

SCHROEDER, C.R. 1933. Cows milk protein hypersensitivity in a walrus. J. Am. Vet. Med. Assoc. 83: 810-815.

SCHROEDER, C.R., and H.B. WEGEFORTH. 1935. The occurrence of gastric ulcers in sea mammals of the California coast, their etiology and pathology. J. Am. Vet. Med. Assoc. 87: 333-342.

SCHULTZ, L.P. 1938. Can the weight of whales and large fish be calculated. J. Mammal. 19: 480-487.

SCHULTZ, L.P., and A.M. RAFN. 1936. Stomach contents of fur seal taken off the coast of Washington. J. Mammal. 17: 13-15.

SCHULZE, G. 1950. The use of whale meal for human nutrition. Dsch. Lebensm. Rundsch. 45: 149-153.

SCHUSTERMAN; R.J. 1980. Behavioral methodology in echolocation by marine mammals, p. 11-41. In R.G. Busnel and J. Fish (ed.) Animal sonar systems. Plenum Press, New York, NY.

SCHUSTERMAN, R.J., and R.L. GENTRY. 1971. Development of a fatted male phenomenon in California sea lions. Dev. Psychobiol. 4: 333-338.

SCHWEINSBURG, R.E., D.J. FURNELL, and S.J. MILLER. 1981. Abundance, distribution and population structure of polar bears in the lower central Arctic islands. Northwest Territories Wildlife Service Completion Report 2: 80 p.

SCHWEINSBURG, R.E., L.J. LEE, and P.B. LATOUR. 1982. Distribution, movement, and abundance of polar bears in Lancaster Sound, Northwest Territories. Arctic 35: 159-169.

SCORESBY, W. 1820. An account of the Arctic regions with a history and description of the northern whale fishery. Vol. 1-2. Constable, Edinburgh.

SCOULOUDI, H. 1960. The crystal structure of myoglobins. 6. Seal myoglobin. Proc. R. Soc. Lond. A. Math. Phys. Sci. 258: 181-201.

SCOULOUDI, H. 1969. X-ray crystallographic studies of seal myoglobin: the molecule at 6 and 5 resolution. J. Mol. Biol. 40: 353-377.

SCOULOUDI, H. 1978. A preliminary comparison of metmyoglobin molecules from seal and sperm whale. J. Mol. Biol. 126: 661-672.

SCOULOUDI, H., and E.N. BAKER. 1978. X-ray crystallographic studies of seal myoglobin. The molecule at 2.5 angstroms resolution. J. Mol. Biol. 126: 637-660.

SCOULOUDI, H., and J.W. PROTHERO. 1965. The nature and configuration of the mercuriiodide ion in the seal myoglobin derivative. J. Mol. Biol. 12: 17-26.

SCOW, R.O., E.J. BLANCHETTE-MACKIE, C.R. MENDELSON, M. HAMOSH, and O. ZINDER. 1973. Incorporation of dietary fatty acids into milk triglyceride: mechanism and regulation, p. 31-45. In N. Kretchner, E. Rossi and F. Sereni (ed.) Modern problems in pediatrics. Vol. 15. Milk and lactation. International Symposium, Campione, Italy, September 9-12, 1973. S. Karger, Basel.

SEAL, U.S. 1969. Carnivora systematics. A study of hemoglobins. Comp. Biochem. Physiol. 31: 799-811.

SEAL, U.S., and R.P. DOE. 1966. The role of corticosteroids-binding globulin in mammalian pregnancy. Excerpta Med. Int. Congr. Ser. 132: 697.

SEAL, U.S., and A.W. ERICKSON. 1969. Immobilization of Carnivora and other mammals with phencyclidine and promazine. Fed. Proc. 28: 1410-1419.

SEAL, U.S., A.W. ERICKSON, P.B. SINIFF, and D.R. CLINE. 1971a. Blood chemistry and protein polymorphism in three species of Antarctic seals (Lobodon carcinophagus, Leptonychotes weddelli and Mirounga leonina). Antarctic Res. Ser. 18: 181-192.

SEAL, U.S., A.W. ERICKSON, D.B SINIFF, and R.J. HOFMAN. 1971b. Biochemical population genetic, phylogenetic, and cytological studies of Antarctic seal species, p. 77-95. In G. Deacon (ed.) Symposium on antarctic ice and water masses (Proceedings) 1970. Science Commission on Antarctic Research, Cambridge, England.

SEAMAN, G.A., AND J. BURNS. 1981. Preliminary results of recent studies of belukhas in Alaskan waters. Int. Whaling Comm. Rep. Comm. 31: 567-574.

SEAMAN, G.A., L.F. LOWRY, and K.J. FROST. 1982. Foods of beluga whales, Delphinapterus leucas, in western Alaska, U.S.A. Cetology 44: 1-19.

SEIDEL, B. 1980. Clinical contribution to the hematology of polar bears, Thalarctos maritimus. Milu 5: 298-302.

SEKERAK, A.D., R.A. BUCHANAN, M.G. FOY, H. BAIN, G.L. WALDER, and H. STALLARD. 1979. Studies of plankton on northwest Baffin Bay and adjacent waters, July-October 1978. Unpublished Report by LGL Ltd., Toronto for Petro Canada, Calgary, 412 p. (Available from Pallister Resource Management Ltd., 707-6 S.W., Calgary, Alberta, T2P 0T8)

SEKI, M., and T. SAITO. 1971. Quantitative comparisons of certain nucleotides in hepatic tissues of some aquatic animals. Int. J. Biochem. 2: 276.

SELANDER, R.K., and W.E. JOHNSON. 1973. Genetic variations among vertebrate species. Annu. Rev. Ecol. Syst. 4: 75-91.

SELVIG, K.A., and S.K. SELVIG. 1962. The mineral content of human and seal cementum. J. Dent. Res. 41: 624-632.

SENDA, M. 1953. Constituents of sperm oil. Yushi Kagaku Kyokaishi 2: 6-10.

SERAT, W.F., M.K. LEE, A.J. VAN LOON, D.C. MENGLE, J. FERGUSON, J.M. BURKS, and T.R. BENDER. 1977. DDT and DDE in the blood and diet of Eskimo children from Hooper Bay, Alaska. Pestic. Monit. J. 11: 1-4.

SERGEANT, D.E. 1959. Studies on the sustainable catch of harp seals in the western north Atlantic. Fish. Res. Board Can. Arct. Biol. Stn Circ. 4: 38 p.

SERGEANT, D.E. 1961. Whales and dolphins of the Canadian east coast. Fish. Res. Board Can. Arct. Biol. Stn Circ. 7: 17 p.

SERGEANT, D.E. 1962. The biology and hunting of beluga or white whales in the Canadian Arctic. Fish. Res. Board Can. Arct. Biol. Stn Circ. 8: 14 p.

SERGEANT, D.E. 1962a. The biology of the pilot or pothead whale, Globicephala melaena (Traill), in Newfoundland waters. Bull. Fish. Res. Board Can. 132: 84 p.

SERGEANT, D.E. 1963. Harp seals and the sealing industry. Can. Audubon 25: 29-35.

SERGEANT, D.E. 1963a. Minke whales, Balaenoptera acutorostrata Lacepede, of the western north Atlantic. J. Fish. Res. Board Can. 20: 1489-1504.

SERGEANT, D.E. 1965. Migrations of harp seals, Pagophilus groenlandicus (Erxleben), in the northwest Atlantic. J. Fish. Res. Board Can. 22: 433-464.

SERGEANT, D.E. 1966. Populations of large whale species in the western north Atlantic with special reference to the fin whale. Fish. Res. Board Can. Arct. Biol. Stn. Circ. 9: 34 p.

SERGEANT, D.E. 1969. Feeding rates of Cetacea. Fiskeridir. Skr. Ser. Havunders. 15: 246-258.

SERGEANT, D.E. 1973a. Feeding, growth and productivity of northwest Atlantic harp seals (Pagophilus groenlandicus). J. Fish. Res. Board Can. 30: 17-29.

SERGEANT, D.E. 1973b. Biology of white whale (Delphinapterus leucas) in western Hudson Bay. J. Fish. Res. Board Can. 30: 1065-1090.

SERGEANT, D.E. 1973c. Environment and reproduction in seals. J. Reprod. Fert. Suppl. 19: 555-561.

SERGEANT, D.E. 1976. History and present status of populations of harp and hooded seals. Biol. Conserv. 10: 95-118.

SERGEANT, D.E. 1976a. Studies on harp seals of the western north Atlantic population in 1976. Int. Comm. Northwest Atl. Fish. (ICNAF) Res. Doc. 76/X/124 (Revised).

SERGEANT, D.E. 1978. Ecological isolation in some Cetacea. In Novoe v izuchenii kittoobraznykh i lastonogykh (Recent advances in the study of whales and seals), p. 20-33. Akad. Nauk SSSR, A.N. Severtsov Inst. Evol. Morf. Ekol. Zhivot. Nauka, Moscow. (In Russian)

SERGEANT, D.E. 1980. Levels of mercury and organochlorine residues in tissues of sea mammals from the St. Lawrence estuary. Int. Counc. Explor. Sea. (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. Mar. Environ. Qual. Comm. 1981/E:55.

SERGEANT, D.E. 1982. Mass strandings of toothed whales, Odontoceti, as a population phenomenon. Sci. Rep. Whales Res. Inst. Tokyo 34: 1-48.

SERGEANT, D.E., and F.A.J. ARMSTRONG. 1973. Mercury in seals from eastern Canada. J. Fish. Res. Board Can. 30: 843-846.

SERGEANT, D.E., and P.F. BRODIE. 1969a. Body size in white whales, Delphinapterus leucas. J. Fish. Res. Board Can. 26: 2561-2580.

SERGEANT, D.E., and P.F. BRODIE. 1969b. Tagging white whales in the Canadian Arctic. J. Fish. Res. Board Can. 26: 2201-2205.

SERGEANT, D.E., and P.F. BRODIE. 1975. Identity, abundance and present status of population of white whales, Delphinapterus leucas, in North America. J. Fish. Res. Board Can. 32: 1047-1054.

SERGEANT, D.E., D.K. CALDWELL, and M.C. CALDWELL. 1973. Age, growth, and maturity of bottlenosed dolphin (Tursiops truncatus) from northeast Florida. J. Fish. Res. Board Can. 30: 1009-1011.

SERGEANT, D.E., and H.D. FISHER. 1957. The smaller Cetacea of eastern Canadian waters. J. Fish. Res. Board Can. 14: 83-115.

SERGEANT, D.E., and H.D. FISHER. 1960. Harp seal populations in western north Atlantic from 1950 to 1960. Fish. Res. Board Can. Arct. Biol. Stn Circ. 5: 38 p.

SERGEANT, D.E., and W. HOEK. 1974. Harp and hooded seals tagged and branded by Canada, 1971-74. Int. Comm. Northwest Atl. Fish. (ICNAF) Res. Doc. 74/117, Ser. 3365.

SERGEANT, D.E., and W. HOEK. 1975. Seasonal distribution of bowhead and white whales in the eastern Beaufort Sea, p. 705-719 In J.C. Reed and J.E Sater (ed.) The coast and shelf of the Beaufort Sea. Arctic Institute of North America, Arlington, VA.

SERGEANT, D.E., A.W. MANSFIELD, and B. BECK. 1970. Inshore records of Cetacea for eastern Canada, 1949-68. J. Fish. Res. Board Can. 27: 1903-1915.

SERGEEV, A.G. 1962. Enrichment of whale oil with vitamin D. Maslob. Zhir. Promst. 28: 39-40. (In Russian)

SEVERINGHAUS, N.C. 1979. Selected annotated references on marine mammals of Alaska. U.S. Dep. Commer. Natl Ocean. Atmos. Admin., (NOAA), Natl Mar. Fish. Serv. Northwest Alaska Fish. Cent., Seattle, WA. 178 p.

SEVERINGHAUS, N.C., and M.K. NERINI. 1977. An annotated bibliography on marine mammals of Alaska. U.S. Dep. Commer. Natl Ocean. Atmos. Admin. (NOAA), Natl Mar. Fish. Serv. (NMFS) Mar. Mamm. Div. Northwest Alaska Fish. Cent. Seattle, WA., Processed Rep. (January, 1977). 25 p.

SHAPIRO, A.P., H. BERLINER, and H.B. MURDAUGH. 1972. Effects of diving on peripheral venous renin activity in the harbour seal, Phoca vitulina. Bull. Mt Desert Isl. Biol. Lab. 12: 105.

SHAPUNOV, V.M. 1973. Food requirements and energy balance in the Black Sea bottlenosed dolphin, Tursiops truncatus ponticus, p. 207-212. In K.K. Chapskii and V.E. Sokolov (ed.) Morphology and ecology of marine mammals, seals, dolphins and porpoises. Halsted Press (Wiley), New York, NY.

SHARP, G.D. 1975. Electrophoretic and oxygen-dissociation properties of the hemoglobins of delphinid cetaceans. Comp. Biochem. Physiol. 51A: 673-681.

SHAUGHNESSY, P.D. 1968. Genetical studies in subantarctic and Antarctic fauna. M.Sc. Thesis, University of Adelaide.

SHAUGHNESSY, P.D. 1969. Transferrin polymorphism and population structure of the Weddell seal, Leptonychotes weddelli (Lesson). Aust. J. Biol. Sci. 22: 1581-1584.

SHAUGHNESSY, P.D. 1970. Serum proteins in the southern fur seals, Arctocephalus spp., in

relation to their taxonomy. Aust. J. Zool. 28: 331-343.

SHAUGHNESSY, P.D. 1971. Biochemical comparison of the pagophilic and pagophobic harbour seals, Phoca vitulina. A preliminary report, p. 100. In Symposium: adaptation for northern life. Proc. Alaska Sci. Conf. 22.

SHAUGHNESSY, P.D. 1974. An electrophoretic study of blood and milk proteins of the southern elephant seal, Mirounga leonina. J. Mammal. 55: 796-808.

SHAUGHNESSY, P.D. 1975a. Biochemical identifications of the harbour seal. Ph.D. Thesis, University of Alaska. 190 p. (Diss. Abstr. Ser. B. 34: 6053-D, 1974)

SHAUGHNESSY, P.D. 1975b. Biochemical comparison of the harbour seals, Phoca vitulina richardi and Phoca vitulina largha. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 70-73.

SHAUGHNESSY, P.D. 1981. Geographical variation in the vitamin A content of livers of adult male Cape fur seals Arctocephalus pusillus, 1941-1949. Fish. Bull. S. Afr. 14: 123-129.

SHAUGHNESSY, P.D., and F.H. FAY. 1977. A review of the taxonomy and nomenclature of north Pacific harbour seals. J. Zool. (Lond.) 182: 385-420.

SHAW, D.H. 1971a. Neutral carboyhydrates in the milk of the bottlenose dolphin, Tursiops truncatus. Carbohydr. Res. 19: 419-422.

SHAW, S.B. 1971b. Chlorinated hydrocarbon pesticides in California sea otters and harbour seals. Calif. Fish Game 57: 290-294.

SHEL'PUK, L.A. 1957. Vitamin A in the fat of seals. Byull. Nauchno-Tekh. Inf. Nauchno-Issled. Inst. Skh. Krain. Severa 2: 11-12. (In Russian)

SHEPELEVA, V.K. 1963a. On the secretory function of stomach in seals, p. 101-109. In A.S. Tsepko (ed.) Sbornik Nauchno-Issled. Ovatelskikh Rabot. 1962 (Grenlandskii tyulen i khokhlach) (A collection of scientific investigations 1962 (Greenland and hooded seals)). Knizh, Arkhangelsk. (In Russian)

SHEPELEVA, V.K. 1963b. The secreting function of the stomach in seals, p. 132-135. In Opyt izucheniia regulitatsii fiziologicheskikh funktsii v estestvennykh. Usloviakh sushchvovania organizmov (Experience in the study of regulating the physiological functions under the natural conditions in the organisms). Akad. Nauk SSSR, Moscow. (In Russian)

SHERGIN, A.L., V.P. SHERGINA, and A.G. BELOBORODOV. 1967. Chemical composition of hairless seal milk. Tr. Vologod. Molochn. Inst. 55: 13-17. (In Russian)

SHIBATA, T. 1951. Studies on the so-called toko-meat (membranous tissue of sperm oil). The distribution of nitrogen in toko-meat. Bull. Fac. Fish. Hokkaido Univ. 1: 90-92.

SHIMAO, M. 1964. The bile acids of Eumetopias jubata. J. Yonago Med. Assoc. 15: 41-44.

SHINEK, S.J. 1977. The under water foraging habits of the sea otter, Enhydra lutris. Calif. Fish Game 63: 120-122.

SHIMIZU, C., and F. MATSUURA. 1962. Some physio-chemical properties of crystalline carbonic anhydrase from erythrocytes of ox, blue-white dolphin and yellowfin tuna. Bull. Jpn. Soc. Sci. Fish. 28: 924-929.

SHIMIZU, C., and F. MATSUURA. 1971. Occurrences of a new enzyme reducing metmyoglobin in dolphin muscle. Agric. Biol. Chem. 35: 468-475.

SHIMMA, Y., and H. TAGUCHI. 1961. A survey of fur seal liver oil and its vitamin A content. Bull. Tokai Reg. Fish. Res. Lab. 30: 117-131.

SHIRAI, R., K. HIROTA, T. OBATA, and T. SAKAGUCHI. 1977. Purification of dolphin creatine kinase by creatine ligand affinity chromatography. Bunseki Kagaku 26: 715-720. (In Japanese)

SHIRE, S.J., G.I.H. HANANIA, and F.R.N. GURD. 1975. Electrostatic effects in myoglobin application of the modified Tanford Kirkwood theory to myoglobins from horse, California grey whale, harbour seal and California sea-lion. Biochemistry 14: 1352-1358.

SHOCHI, Y., K. ZBINDEN, C. KRAUS, M. GIHR, and G. PILLERI. 1982. Characteristics and directional properties of the sonar signals emitted by the captive commersons dolphin, Cephalorhynchus commersoni. Invest. Cetacea 13: 177-204.

SHOUBRIDGE, E.A., J.E. CARSCADDEN, and W.C. LEGGETT. 1976. LDH isozyme patterns in cetaceans: evidence for a biochemical adaptation to diving. Comp. Biochem. Physiol. 53B: 357-359.

SHUN'ICHI, D., T. SHIN'ICHI, K. TOSHIAKI, O. TOSHIHIRO, D. HIROAKI, S. NORIKO, S. JUNICHI, K. KAZUHIKO, and K. SUMIO. 1983. Milk of northern fur seal. Composition especially carbohydrate and protein. J. Dairy Sci. 66: 2076-2083.

SHUSTOV, A.P. 1965. On the feeding habits of the ribbon seal in the Bering Sea. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 59: 178-183. (In Russian)

SHUSTOV, A.P. 1970. Daily dynamics of seal rookeries in the Sea of Okhotsk. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 71: 283-288. (Can. Fish. Mar. Serv. Transl. Ser. 2402, 1973: 1-14)

SIDWELL, V.D. 1981. Chemical and nutritional composition of finfishes, whales, crustaceans, mollusks and their products. Report 1981, NOAA-TMNMFS-F/Sec-11, NOAA-81033001; NTIS Rep. PB81-201493: 440 p. (Gov. Rep. Announce. 1981, 811201, 4266)

SIEGMUND, W. 1959. Treatment of sea-animal proteins. Austrian Patent 203, 348, May 11, 1959.

SIGEL, M. 1972. Virological studies of dolphins. U.S. National Technical Information Service, Washington, DC. (Available from NTIS as AD-751688: 4 p.) (Gov. Rep. Announce. 1973, 73C1, 51)

SILVERMAN, H.B. 1979. Social organization and behaviour of the narwhal, Monodon monoceros L., in Lancaster Sound, Pond Inlet, and Tremblay Sound, N.W.T. Ph.D. Thesis, McGill University, Montreal, PQ.

SIMMERMAN, H.K.B., C.-C. WANG, E.M. HORWITZ, J.A. BERZOFSKY, and F.R.N. GURD.1982. Semisynthesis of sperm whale myoglobin by fragment condensation. Proc. Natl Acad. Sci. USA 79: 7739-7743.

SIMON, L.M., E.D. ROBIN, R. ELSNER, A.L.G.J. VAN KESSEL, and J. THEODORE. 1974. A biochemical basis for differences in maximal diving time in aquatic mammals. Comp. Biochem. Physiol. 47B: 209-215.

SIMONSEN, V., F.W. ALLENDORF, W.F. EANES, and F.O. KAPEL. 1982a. Electrophoretic variation in large mammals. 3. The ringed seal, Pusa hispida, the harp seal, Pagophilus groenlandicus), and the hooded seal, Cystophora cristata. Hereditas 97: 87-90.

SIMONSEN, V., E.W. BORN, and T. KRISTENSEN. 1982b. Electrophoretic variation in large mammals. 4. The Atlantic walrus, Odobenus rosmarus rosmarus. Hereditas 97: 91-94.

SIMPSON, G.G. 1945. The principles of classification and a classification of mammals. Bull. Am. Mus. Nat. Hist. 85: xvi + 114 p.

SIMPSON, J.G. 1970. Observations on the effects of pollution upon marine mammals. J. Am. Vet. Med. Assoc. 156: 1244.

SIMPSON, J.G., and M.B. GARDNER. 1972. Comparative microscopic anatomy of selected marine mammals, p. 298-418. In S.H. Ridgway (ed.) Mammals of the sea. C.C. Thomas, Philadelphia, PA.

SIMPSON, J.G., W.G. GILMARTIN, and S.H. RIDGWAY. 1970. Blood volume and other hematologic values on young elephant seals, Mirounga angustirostris. Am. J. Vet. Res. 31: 1449-1452.

SINCLAIR, H.M. 1981. The relative importance of essential fatty acids of the linoleic and linolenic families studies with an Eskimo diet. Prog. Lipid Res. 20: 897-900.

SINGH, E.J., and L.L. GERSHBEIN. 1969. Fatty acids of marine oils and pig liver lipids. Trans. Ill. State Acad. Sci. 62: 54-60.

SINHA, A.A., and A.W. ERICKSON. 1976. The regresion of Leydig cells and testosterone levels in Antarctic seals during non-breeding season. Anat. Rec. 184: 530.

SINIFF, D.B. 1981. Seal population dynamics and ecology. J. R. Soc. N. Z. 11: 317-327.

SINIFF, D.B., D. DEMASTER, R. HOFMAN, and L. EBERHARDT. 1977. An analysis of the dynamics of a Weddell seal population. Ecol. Monogr. 47: 319-335.

SINIFF, D.B., S. STONE, D. REICHLE, and T. SMITH. 1981. Aspects of leopard seals, Hydrurga leptonyx, in the Antarctic Peninsula pack ice. Antarct. J. U.S. 15: 160.

SINITSYNA, A.L., YU.M. KEDA, T.A. OSIPOVA, G.P. ELIZAROVA, and L.V. ALESHINA. 1972. Isolation of growth hormone and prolactin from whale hypophysis and their characteristics. Probl. Endokrinol. 18: 71-74. (In Russian)

SINNETT, E.E., E.A. WAHRENBROCK,and G.L. KOOYMAN. 1981. Cardiovascular depression and thermoregulatory disruption caused by pentothal/halothane anesthesia in the harbour seal, Phoca vitulina. J. Wildl. Dis. 17: 121130.

SIVERSTEN, E. 1934. Ueber die Chemische Zusammensetzung von Robbemilch. Nytt Mag. Naturvidensk. 74: 183-185.

SIVERSTEN, E. 1941. On the biology of the harp seal, Phoca groenlandica Erxl. Hvalradets Skr. 26: 1-164.

SIVERSTEN, E. 1941. On the biology of the harp seal, Phoca groenlandica Erxl. Hvalradets Skr. 26: 1-164.

SIVERSTEN, K., and A. BJORGE. 1980. Reduction of algal vegetation in Helgeland, Norway coastal waters. Fisken Havet. (4): 1-9.

SJÖSTRAND, T. 1962. Blood volume, p. 51-62. In W.F. Hamilton (ed.) Handbook of physiology. Sect. 2. Vol. 1. American Physiological Society, Washington, DC.

SKINDER, C. 1979. Harbor seals, Phoca vitulina, p. 268-270. In J.R. Geraci and D.J. St. Aubin (ed.) Biology of marine mammals: insights through strandings. U.S. Mar. Mamm. Comm. Rep. MMC/77/13. U.S. National Technical Information Service, Washington, DC. (Available from NTIS as PB-293890.)

SKINDER, C., and J. MEAD. 1979. Marine mammal strandings: on site problems and solutions, p. 248-261. In J.R. Geraci and D.J. St. Aubin (ed.) Biology of marine mammals: insights through strandings. U.S. Mar. Mamm. Comm. Rep. MMC-77/13. U.S. National Technical Information Service, Washington, DC. (Available from NTIS as PB-293890.)

SLADEN, W.J.L., C.M. MENZIE, and W.L. REICHEL. 1966. DDT residues in Adelie penguins and a crabeater seal from Antarctica: ecological implications. Nature (Lond.) 210: 670-673.

SLEET, R.B., J.L. SUMICH, and L.J. WEBER. 1981. Estimate of total blood volume and total body weight of a sperm whale (Physeter catodon). Can. J. Zool. 59: 567-570.

SLEPTSOV, M.M. 1949. New information concerning the reproduction of far east pinnipeds. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 31: 73-77. (Fish. Res. Board Can. Transl. Ser. 149, 1957)

SLEPTSOV, M.M. 1961a. Feeding regions of whales in the Bering Sea. Tr. Inst. Morfol. Zhivotn. Akad. Nauk SSSR 34: 65-78. (In Russian)

SLEPTSOV, M.M. 1961b. Distribution of feeding areas and whales in the Okhotsk Sea. Tr. Inst. Morfol. Zhivotn. Akad. Nauk SSSR 34: 79-92. (In Russian)

SLEPTSOV, M.M. 1961c. Results of the weighing of large and small whales captured in the Far East. Tr. Inst. Morfol. Zhivotn. Akad. Nauk SSSR 34: 144-150. (In Russian)

SLIJPER, E.J. 1948. On the thickness of blubber in Antarctic blue and finwhales. K. Ned. Akad. Wet. Versl. Gewone Vergad. Afd. Natuurkd. 51: 1033-1045.

SLIJPER, E.J. 1954. On the importance of measuring the thickness of the layer of blubber in whales. Nor. Hvalfangst-Tid. 43: 510-516.

SLIJPER, E.J. 1956. Some remarks on gestation and birth in Cetacea and other aquatic mammals. Hvalradets Skr. 41.

SLIJPER, E.J. 1958. Organ weights and symmetry problems in porpoises and seals. Arch. Neerl. Zool. 13(Suppl. 1): 97-113.

SLIJPER, E.J. 1962. Whales. Hutchinson, London.

SMIRNOV, H.A. 1927. Diagnostical remarks about some seals (Phocidae) of the Northern Hemisphere. Tromso Mus. Aarsh. 48(5): 1-23, 1925.

SMITH, A.W., T.G. AKERS, C.M. PRATO, and H.L. BRAY. 1976. Prevalence and distribution of 4 serotypes of San Miguel sea lion virus serum neutralizing antibodies in wild animal populations. J. Wildl. Dis. 12: 326-334.

SMITH, A.W., D.G. RITTER, G.C. KAY, D.E. SKILLING, and D. WARTZOK. 1983a. New calicivirus isolates from feces of walrus, Odobenus rosmarus. J. Wildl. Dis. 19: 86-89.

SMITH, E.A. 1966a. Foster feeding in the grey seal. Bull. Mamm. Soc. Br. Isles 26.

SMITH, E.A. 1966b. Mother-young relations in the grey seal. Bull. Mamm. Soc. Br. Isles 26: 13-14.

SMITH, E.A. 1968. Adaptive suckling in the grey seal. Nature (Lond.) 217: 762-763.

SMITH, G.J.D. 1971. The diet and stomach of the harbour porpoise (Phocoena phocoena L.). M.Sc. Thesis, University of Guelph, Guelph, ON. 70 p.

SMITH, G.J.D., and D.C. GASKIN. 1974. The diet of harbour porpoises, Phocoena phocoena, in coastal waters of eastern Canada with special reference to the Bay of Fundy. Can. J. Zool. 52: 777-782.

SMITH, G.J.D., and D.E. GASKIN. 1983. An environmental index for habitat utilization by female harbour porpoises, Phocoena phocoena, with calves near Deer Island, Bay of Fundy, Canada. Ophelia 22: 1-14.

SMITH, H.W. 1936. The composition of urine in the seal. J. Cell. Comp. Physiol. 7: 465-474.

SMITH, J.E., N. MOHANDAS, and S.B. SHOHET. 1979a. Variability in erythrocyte deformability among various mammals. Am. J. Physiol. 236: H725-H730.

SMITH, M., and B. RIGBY. 1981. Distribution of polynyas in the Canadian Arctic, p. 7-28. In I. Stirling and H. Cleator (ed.) Polynyas in the Canadian Arctic. Can. Wildl. Serv. Occas. Pap. 45.

SMITH, M.H., and J. JOULE. (ed.) 1981. Mammalian population genetics. University of Georgia Press, Athens, GA. 380 p.

SMITH, R.E. (ed.) 1974. Symposium: marine environmental implications of offshore drilling in eastern Gulf of Mexico. Proceedings of a symposium on marine environmental implications of offshore drilling in the eastern Gulf of Mexico. Florida State University, Institute of Oceanography, St. Petersburg, FL.

SMITH, R.E., and B.A. HORWITZ. 1969. Brown fat and thermogenesis. Physiol. Rev. 49: 330-425.

SMITH, T.D. 1983. Changes in size of three dolphins, Stenella spp., populations in the eastern tropical Pacific. U.S. Natl Mar. Fish. Serv. Fish. Bull. 83: 1-14.

SMITH, T.G. 1973a. Population dynamics of the ringed seal in the Canadian eastern Arctic. Bull. Fish. Res. Board Can. 181: 1-55.

SMITH, T.G. 1973b. Management research on the Eskimo's ringed seal. Can. Geog. J. 86: 118-125.

SMITH, T.G. 1975. Ringed seals in the James Bay and Hudson Bay, Canada, population estimates and catch statistics. Arctic 28: 170-182.

SMITH, T.G. 1975a. Parameters and dynamics of ringed seal populations in the Canadian eastern Arctic. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 281-295.

SMITH, T.G. 1976. Predation of ringed seal pups, Phoca hispida, by the Arctic fox, Alopex lagopus. Can. J. Zool. 54: 1610-1616.

SMITH, T.G. 1977. The wolffish cf. Anarhichas denticulatius new to the Amundson Gulf area, Northwest Territories and probable prey of the ringed seal. Can. Field-Nat. 91: 288.

SMITH, T.G. 1978. Variation in the density of ringed seal (Phoca hispida) birth lairs in the Amundsen Gulf, Northwest Territories. Can. J. Zool. 56: 1066-1070.

SMITH, T.G. 1980. Polar bear, Ursus maritimus, predation of ringed seal, Phoca hispida, and bearded seals, Erignathus barbatus, in the land fast sea ice habitat. Can. J. Zool. 58: 2201-2209.

SMITH, T.G., and F.A.J. ARMSTRONG. 1975. Mercury in seals, terrestrial carnivores and principal food items of the Inuit from Holman, N.W.T. J. Fish. Res. Board Can. 32: 795-801.

SMITH, T.G., and F.A.J. ARMSTRONG. 1978. Mercury and selenium in ringed and bearded seal tissues from Arctic Canada. Arctic 31: 75-84.

SMITH, T.G., B. BECK, and G.A. SLENO. 1973. Capture, handling, and branding of ringed seals. J. Wildl. Manage. 37: 579-583.

SMITH, T.G., J.R. GERACI, and D.J. ST. AUBIN. 1983. Reaction of bottlenosed dolphins, Tursiops truncatus, to a controlled oil spill. Can. J. Fish. Aquat. Sci. 40: 1522-1525.

SMITH, T.G., and M.O. HAMMILL. 1980. A survey of the breeding habitat of the ringed seals, Phoca hispida, and a study of other behaviour during the spring haul-out period in southeastern Baffin Island, Canada. Addendum to the final report to the eastern Arctic marine environmental studies project. Can. Manuscr. Rep. Fish. Aquat. Sci. 1561: viii + 47 p.

SMITH, T.G., and M.O. HAMMILL. 1981. Ecology of the ringed seal, Phoca hispida, in its fast ice breeding habitat. Can. J. Zool. 59: 966-981.

SMITH, T.G., M.O. HAMILL, D.W. DOIDGE, T. CARTIER, and G.A. SLENO. 1979. Marine mammal studies in southeastern Baffin Island. Can. Manuscr. Rep. Fish. Aquat. Sci. 1552: 45-51.

SMITH, T.G., and I. STIRLING. 1975. The breeding habitat of the ringed seal, Phoca hispida; the birth lair and associated structures. Can. J. Zool. 53: 1297-1305.

SOBOLEVSKII, E.I. 1982. Distribution, numbers and some ecological features of the sea, Phoca vitulina insularis, Pinnipedia, Phocidae. Zool. Zh. 61: 1901-1908. (In Russian)

SOEDERBERG, S. 1971a. Food habits of seals in the Baltic Sea. Fiskeritidskr. Finl. 14(4/5): 90-92. (In Swedish)

SOEDERBERG, S. 1971b. Commercial damage and feeding habits of seals in the Baltic: A preliminary report. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mammal. Comm. 1971/N: 3.

SOERGEL, M.E., T.G. AKERS, and F.L. SCHATTER. 1976. Amino acid composition of three immunological types of a calicivirus, San Miguel sea lion virus. Virology 72: 527-529.

SOEVIK, T., and O.R. BRAEKKAN. 1981. The fluoride contents in some Norwegian fish products and other marine products. Fiskeridir. Skr. Ser. Ernaer. 2: 1-6.

SOKOLOV, A.S. 1958. Feeding of the seals in Lake Ladoga and efficient fishery. Rybn. Khoz. (10): 25-27. (In Russian)

SOKOLOV, A.S. 1959. The structure of the cutaneous integument of Pinnipedia. Byull. Mosk. Ova. Ispyt. Prir. Otd. Biol. 64: 5-21. (U.S. Dep. Commer., Off. Tech. Serv. Transl. 63)

SOKOLOV, A.S. 1966. Ecolo-functional and age peculiarities of red blood in north Pacific Pinnipedia. Dokl. Akad. Nauk SSSR 169: 683-684. (In Russian)

SOKOLOV, A.S. 1967. An experiment to investigate the blood properties of northern Pacific Ocean pinnipeds, p. 137-146. In K.K. Chapskii and M.I. Iakovenko (ed.) Issledovaniya morskikh mlekopitayushchie (Research on marine mammals). Tr. Polyarn. Nauchno-Issled. Proetkn. Inst. Morsk. Rybn. Khoz. Okeanogr. 21. (In Russian)

SOKOLOV, A.S. 1969. Quantity of myoglobin and blood in some Otariidae and Phocidae, p. 193-196. In Morskie mlekopitayushchie (4th All-Union Conf. Study Mar. Mamm., Kaliningrad, 16-18 Sept., 1969). Moscow: Akad. Nauk SSSR Zool. Inst., Inst. Evol. Morfol. Ekol. Zhivotn. Inst. Biol. Razrit: Minist. Rybn. Khoz. SSSR Ikhtiol. Kom. VNIRO Atl. (In Russian)

SOKOLOV, A.S., G.M. KOSYGIN, and E.A. TIKHOMIROV. 1966. Some information on the weight of internal organs of pinnipeds of the Bering Sea. Izv. Tikhookean. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 50. (In Russian)

SOKOLOV, V.E. 1960. The skin structures in Pinnipedia of the U.S.S.R. fauna. J. Morphol. 107: 285-296.

SOKOLOV, V.E. 1961. Determining the phase of the reproductive cycle in female, Delphinus delphis L., by vaginal smears. Tr. Soveshch. Ikhtiol. Kom. Akad. Nauk SSSR 12: 68- . (In Russian)

SOKOLOV, V.E., and V.A. RODIONOV. 1978. Histochemical study of succinate dehydrogenase in muscle of the dolphin, Tursiops truncatus (Delphinidae, Cetacea). Dokl. Akad. Nauk. SSSR 238: 1252-1255. (In Russian)

SOKOLOVA, I.A., V.P. PARCHEVSKII, G.E. LAZORENKO, and N.V. SOKOLOVA. 1971. Methodical characteristics of the determination of strontium-90 in marine organisms. Tr. Inst. Ekol. Rast. Zhivotn. Ural. Nauch. Tsentr. Akad. Nauk SSSR 78: 205-211, 1968. (In Russian)

SOKOLOVA, N.V. 1969. Artifical radioactivity of gray whales. Radiobiologiya 9: 748-750. (In Russian)

SOKOLOVA, N.V., and V.P. PARCHEVSKII. 1968. Radioactivity in the ringed seal. Radiobiologiya 8: 176-179. (In Russian)

SOKOLOVA, N.V., and V.P. PARCHEVSKII. 1972. Lead-210 in some aquatic fauna in the Sea of Okhotsk and the Bering Sea. Ekologiya (5): 30-36. (Sov. J. Ecol. 3: 411-416)

SOLDATOVIC, D., and C. PETROVIC. 1970. Complex-forming preparations as antidotes during metal poisoning and especially effect of dithiocarbamate during acute poisoning of porpoise by thallum and arsenic. Arh. Farm. (Belgr.) 20: 187-191.

SOLIANIK, G.A. 1964. Experiment in marking seals from small ships. Inf. Byull. Sov. Antarkt. Eksped. 5: 212. (In Russian)

SOLNTSEVA, G.N. 1983. Early development of the acoustic analyzer peripheral region in, Stenella attenuata, Odontoceti. Ontogenez 14: 312-318. (In Russian)

SOLOV'EV, V.V., and N.A. KOLCHANOV. 1982. Amino acid substitutions can lead to complete disortation of the normal spatial structure of globular proteins. Sov. Genet. (Engl. Transl. Genetika) 18: 1161-1168.

SOMERO, G.N., and K. JOHANSEN. 1970. Temperature effects on enzymes from homeothermic and heterothermic tissues of the harbour seal (Phoca vitulina). Comp. Biochem. Physiol. 34: 131-136.

SONNENFELD, J. 1957. Changes in the subsistence among the Barrow Eskimo. Ph.D. Thesis, Johns Hopkins University, Baltimore, MD.

SONO, M., and J.H. DAWSON. 1982. Formation of low spin complexes of iron III cytochrome P450-CAM with anionic ligands spin state and ligand affinity comparison to myoglobin. J. Biol. Chem. 257: 5496-5502.

SORDAHL, L.A., G. MUELLER, and R. ELSNER. 1983. Comparative functional properties of mitochondria from seal, Phoca vitulina, and dog hearts. J. Mol. Cell Cardiol. 15: 1-6.

SORIMACHI, K., and N. UI. 1974. Comparison of the iodoamino acid distribution in thyroglobulins obtained from various animal species. Gen. Comp. Endocrinol. 24: 38-43.

SOUTH, F.E., R.H. LUECKE, M.L. ZATZMAN, and M.D. SHANKLIN. 1976. Air temperature and direct partitional calorimetry of the California sea lion (Zalophus californianus). Comp. Biochem. Physiol. 54A: 27-30.

SOUTHCOTT, R.V. 1982. Vitamin A content of liver of the Australian sea lion, Neophoca cinerea, and its toxicological significance. Trans. R. Soc. S. Aust. 106: 85-92.

SOUTHCOTT, R.V., N.J. CHESTERFIELD, and D.J. LUGG. 1971. Vitamin A content of the liver of huskies and some seals from the Antarctic and subantarctic regions. Med. J. Aust. 1: 311-336.

SOUTHCOTT, R.V., N.J. CHESTERFIELD, and R.N. WARNEKE. 1974. The vitamin A content of liver of the Australian fur seal, Arctocephalus pusillus doriferus. Aust. Wildl. Res. 1: 145-148.

SPALDING, D.J. 1964. Comparative feeding habits of the fur seal, sea lions and harbour seal on the British Columbia coast. Bull. Fish. Res. Board Can. 146: 52 p.

SPEARMAN, R.I.C. 1968. A histochemical examination of the epidermis of the southern elephant seal (Mirounga leonina) during the telogen stage of hair growth. Aust. J. Zool. 16: 17-26.

SPELLENBERG, I.F. 1975. Predations of penguins, p. 413-434. In B. Stonehouse (ed.) Biology of penguins. University Park Press, Baltimore, MD.

SPENCER, G.F. 1979. Alkoxy-acyl combination of the wax esters from winterized sperm whale oil by gas chromatography-mass spectrometry. J. Am. Oil Chem. Soc. 56: 642-646.

SPENCER, G.F., and R. KLEIMAN. 1978. Detection of spermaceti cream. J. Am. Oil Chem. Soc. 55: 837-838.

SPENCER, G.F., and W.H. TALLENT. 1973. Sperm whale oil analysis by gas chromatography and mass spectrometry. J. Am. Oil. Chem. Soc. 50: 202-206.

SPENCER, M.P., T.A. GORNALL, and T.C. POULTER. 1967. Respiratory and cardiac activity of killer whales. J. Appl. Physiol. 22: 974-981.

SPENCER, R.F. 1959. The north Alaskan Eskimo: a study in ecology and society. Smithson. Inst. Bur. Am. Ethnol. Bull. 171: 490 p.

SPOTTE, S. 1980. Acclimation of adult northern fur seals, Callorhinus ursinus, to captivity. Cetology 36: 1-8.

SPOTTE, S., and G. ADAMS. 1979. Note on the food intake of captive adult male northern fur seals (Callorhinus ursinus). Aquat. Mamm. 7: 65-67.

SPOTTE, S., and G. ADAMS. 1981. Feeding rate of captive adult female northern fur seals, Callorhinus ursinus. U.S. Natl Mar. Fish. Serv. Fish. Bull. 79: 182-184.

SPOTTE, S., J.L. DUNN, L.E. KEZER, and F.M. HEARD. 1978. Notes on the care of a beach stranded harbour porpoise, Phocoena phocoena. Cetology 32: 1-6.

SPOTTE, S., C.W. RADCLIFFE, and J.L. DUNN. 1979. Notes on Commerson's dolphin, Cephalorhynchus commersonii, in captivity. Cetology 35: 1-9.

SPOTTE, S., and P.E. STAKE. 1982. Hand-rearing of twin gray seals (Halichoerus grypus) from birth to weaning. Mar. Ecol. (Berl.) 9: 181-189.

SQUIRES, H.J. 1969. Decapod Crustacea of the Beaufort Sea and Arctic waters eastward of Cambridge Bay, 1960-65. J. Fish. Res. Board Can. 26: 1899-1918.

SRINIVASAN, R., and V. RAVICHANDRAN. 1982. Analysis of protein crystallographic structural data analysis of the orientation of peptide planes. Int. J. Biol. Macromol. 4: 211-214.

STAKE, P.E., and S. SPOTTE. 1982. Estimate of the maintenance energy requirement of the gray seal from birth to weaning. Fed. Proc. 41(4): 942 (Abstr. 3928).

STALLING, D.L., J.D. PETTY, L.M. SMITH, C. RAPPE, and H.R. BUSER. 1982. Isolation and analysis of polychlorinated dibenzofurans in aquatic samples, p. 77-85. In O. Hutzinger, R.W. Frei, E. Merrian and F. Pocchiari. Chlorinated dioxins and related compounds: impact on the environment. Pergamon Press. (Pergamon Ser. Environ. Sci. 51.)

STARKS, D.S. 1927-1928. The spermatogenesis of the Pribilof fur seal (Callorhinus alascanus Jordan and Clark). Am. J. Anat. 40: 471-499.

ST. AUBIN, D.J. 1976. Tissue enzyme distribution in phocid seals. M.Sc. Thesis, University of Guelph, Guelph, ON.

ST. AUBIN, D.J., T.P. AUSTIN, and J.R. GERACI. 1979. Effects of handling stress on plasma enzymes in harp seals, Phoca groenlandica. J. Wildl. Dis. 15: 569-572.

ST. AUBIN, D.J., and J.R. GERACI. 1977. Tissue distribution and plasma levels of liver enzymes in phocid seals. Can. J. Zool. 55: 1936-1941.

ST. AUBIN, D.J., and J.R. GERACI. 1980. Tissue levels of ascorbic acid in marine mammals. Comp. Biochem. Physiol. 66A: 605-609.

ST. AUBIN, D.J., J.R. GERACI, T.G. SMITH, and V.I. SMITH. 1978. Blood volume determination in ringed seal, Phoca hispida. Can. J. Zool. 56: 1885-1888.

STEDMAN, M.A., H.W. CASEY, and M.C. KEYES. 1976. Lymphosarcoma in an infant northern fur seal. Lab. Invest. 34: 333.

STEDMAN, M.A., M.A. CASEY, and M.C. KEYES. 1977. Lymphosarcoma in an infant northern fur seal (Callorhinus ursinus). J. Wildl. Dis. 13: 176-179.

STEINER, W.W., J.H. HAIN, H.E. WINN, and P.J. PERKINS. 1979. Vocalizations and feeding behaviour of the killer whale, Orcinus orca. J. Mammal. 60: 823-827.

STEPHENSON, M.D. 1977. Sea otter predation of pismo clams in Monterey Bay. Calif. Fish Game 63: 117-120.

STERLING, K., P.O. MILCH, and S.H. RIDGWAY. 1975. The day of the dolphin: thyroid hormone metabolism in marine mammals, p. 241-248. In W.A. Harland and J.S. Orr (ed.) Thyroid hormones metabolism, Proceedings of the International Symposium, 1974. Academic Press, London.

STEWART, R.E.A., and D.M. LAVIGNE. 1979. Age determination in harp seals. International workshop on biology and management of northwest Atlantic harp seals, Guelph, ON., December 3-6, 1979. Working Paper HS/WP 10: 8 p.

STEWART, R.E.A., and D.M. LAVIGNE. 1980. Neonatal growth in the northwest Atlantic harp seal (Pagophilus groenlandicus). J. Mammal. 60: 670-680.

STEWART, R.E.A., N. LIGHTFOOT, and S. INNES. 1981. Parturition in harp seals. J. Mammal. 62: 845-850.

STEWART, R.E.A., B.E. WEBB, D.M. LAVIGNE, and F. FLETCHER. 1983. Determining lactose content of harp seal milk. Can. J. Zool. 61: 1094-1100.

STIRLING, I. 1966a. A technique for handling live seals. J. Mammal. 47: 543-544.

STIRLING, I. 1966b. Seal marking in McMurdo Sound. Antarctic (Wellington) 4(7): 363-364.

STIRLING, I. 1967. Population studies on the Weddell seal (Leptonychotes weddelli). Tuatara 15: 133-141.

STIRLING, I. 1969. Ecology of the Weddell seal in the McMurdo Sound, Antarctica. Ecology 50: 573-586.

STIRLING, I. 1971. Population dynamics of the Weddell seal (Leptonychotes weddelli) in McMurdo Sound, Antarctica, 1966-1968, p. 141-161. In W.H. Burt (ed.) Antarctic

Pinnipedia. American Geophysical Union, Washington, DC. (Antarct. Res. Ser. 18)

STIRLING, I. 1971a. Variation in sex ratio of newborn Weddell seals during the pupping season. J. Mammal. 4: 842-844.

STIRLING, I. 1971b. Studies on the behaviour of the south Australian fur seal, Arctocephalus forsteri (Lesson): I. Annual cycle, postures and calls of adult males during breeding cycle. Aust. J. Zool. 19: 243-266.

STIRLING, I. 1973. Vocalizations in the ringed seal (Phoca hispida). J. Fish. Res. Board Can. 30: 1592-1594.

STIRLING, I. 1977. Adaptations of Weddell and ringed seals to exploit polar fast ice habitat in the presence or absence of land predators, p. 741-748. In G.A. Llano (ed.) Adaptations within Antarctic ecosystems. Proceedings of the third symposium on Antarctic biology. Gulf Publishing Co., Houston, TX.

STIRLING, I. 1980. The biological importance of polynyas in the Canadian Arctic. Arctic 33: 303-315.

STIRLING I. 1982. The evolution of mating systems in pinnipeds, p. 489-527. In J.F. Eisenberg and D.G. Kleiman (ed.) Recent advances in the study of mammalian behaviour. Spec. Publ. Am. Soc. Mammal. 7.

STIRLING, I., D. ANDRIASHEK, D. LATOUR, and W. CALVERT. 1975. The distribution and abundance of polar bears in the eastern Beaufort Sea. A Final Report to the Beaufort Sea Project, Fisheries and Marine Service, Department of the Environment, Victoria, BC. 59 p.

STIRLING, I., D. ANDRIASHEK, and W. CALVERT. 1981. Habitat preferences and distribution of polar bears in the western Canadian Arctic. Report for Dome Petroleum Limited, Esso Resources Canada Limited, and the Canadian Wildlife Service. 49 p.

STIRLING, I., and W.R. ARCHIBALD. 1977. Aspects of predation of seals by polar bears. J. Fish. Res. Board Can. 34: 1126-1129.

STIRLING, I., R. ARCHIBALD, and D. DEMASTER. 1977a. Distribution and abundance of seals in the eastern Beaufort Sea. J. Fish. Res. Board Can. 34: 976-988.

STIRLING, I., and W. CALVERT. 1983. Environmental threats to marine mammals in the Canadian Arctic. Polar Rec. 21: 433-449.

STIRLING, I., W. CALVERT, and D. ANDRIASHEK. 1980. Population ecology studies of the polar bear in the area of southeastern Baffin Island. Can. Wildl. Serv. Occas. Pap. 44: 33 p.

STIRLING, I., W. CALVERT, and H. CLEATOR. 1983. Underwater vocalization as a tool for studying the distribution and relative abundance of wintering pinnipeds in the high Arctic. Arctic 36: 262-274.

STIRLING, I., and H. CLEATOR (ed.) 1981. Polynyas in the Canadian Arctic. Can. Wildl. Serv. Occas. Pap. 45: 72 p.

STIRLING, I., H. CLEATOR, and T.G. SMITH. 1981a. Marine mammals, p. 45-48. In I. Stirling and H. Cleator (ed.) Polynyas in the Canadian Arctic. Can. Wildl. Serv. Occas. Pap. 45: 22 p.

STIRLING, I., and C. JONKEL. 1972. The great white bears. Nat. Can. (Ottawa) 1: 15-18.

STIRLING, I., C. JONKEL, P. SMITH, R. ROBERTSON, and D. CROSS. 1977b. The ecology of the polar bear (Ursus maritimus) along the western coast of Hudson Bay. Can. Wildl. Serv. Occas. Pap. 33: 64 p.

STIRLING, I., and H.P.L. KILIAAN. 1980. Population ecology studies of the polar bear in northern Labrador. Can. Wildl. Serv. Occas. Pap. 42: 21 p.

STIRLING, I., M. KINGSLEY, and W. CALVERT. 1982. The distribution and abundance of seals in the eastern Beaufort Sea, 1974-79. Can. Wildl. Serv. Occas. Pap. 47.

STIRLING, I., and E.H. McEWAN. 1975. The caloric value of whole ringed seals (Phoca hispida) in relation to polar bear (Ursus maritimus) ecology and hunting behaviour. Can. J. Zool. 53: 1021-1027.

STIRLING, I., A.M. PEARSON, and F.L. BUNNELL. 1976. Population ecology studies of polar and grizzly bears in northern Canada. Trans. N. Am. Wildl. Conf. 41: 421-430.

STIRLING, I., J.C. REED, and J.E. SATER (ed.). 1975a. Polar bear research in the Beaufort Sea, p. 721-733. In J.C. Reed and J.E. Sater (ed.) The coast and shelf of the Beaufort Sea. Arctic Institute of North America, Arlington, VA.

STIRLING, I., R.E. SCHWEINSBURG, W. CALVERT, and H.P.L. KILIAAN. 1978. Population ecology of the polar bear along the proposed Arctic Islands Gas Pipeline Route. Final Report to the Environmental Management Service, Department of the Environment, Edmonton, AB. 93 p.

STIRLING, I., and T.G. SMITH. 1977. Interrelationships of Arctic Ocean mammals in the sea ice habitat, p. 129-136, Section II. In Proceedings of the circumpolar conference on northern ecology, September 15-18, 1975, Ottawa. National Research Council, Ottawa, ON.

STIRLING, I., and R.M. WARNEKE. 1971. Comparison of the airborne vocalizations and some aspects of the behaviour of the two Australian fur seal species (Arctocephalus sp.) on the evolution and present taxonomy of the genus. Aust. J. Zool. 19: 227-242.

STOLK, A. 1950. Tumours in whales. Amsterdam Naturalist 1: 28-33.

STOLK, A. 1952. Some tumours in whales. Proc. K. Ned. Akad. Wet. Ser. C. Biol. Med. Sci. 55: 275-278.

STOLK, A. 1953a. Some inflammations in whales. Proc. K. Ned. Akad. Wet. Ser. C. Biol. Med. Sci. 56: 364-368.

STOLK, A. 1953b. Hepatic cirrhosis in the blue whale (Balaenoptera musculus). Proc. K. Ned. Akad. Wet. Ser. C. Biol. Med. Sci. 56: 375-378.

STOLK, A. 1953c. Some tumours in whales II. Proc. K. Ned. Akad. Wet. Ser. C. Biol. Med. Sci. 56: 369-373.

STOLK, A. 1954a. Some inflammations in whales II. Proc. K. Ned. Akad. Wet. Ser. C. Biol. Med. Sci. 57: 254-257.

STOLK, A. 1954b. A new case of hepatic cirrhosis in the blue whale (Balaenoptera musculus). Proc. K. Ned. Akad. Wet. Ser. C. Biol. Med. Sci. 57: 258.

STOLK, A. 1962. Tumours in whales III. Proc. K. Ned. Akad. Wet. Ser. C. Biol. Med. Sci. 65: 250- .

STONE, H.L., K. GRAY, R. STABE, and J.M. CHANDLER. 1973. Renal blood flow in a diving trained sea lion. Nature (Lond.) 242: 530-531.

STONE, H.S., and D.B. SINIFF. 1981. Leopard seal feeding and food consumption in Antarctic spring and summer, p. 112. In Symposium: biology of marine mammals, Abstracts. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

STONEBURNER, D.L. 1978. Heavy metals in tissues of stranded short-finned pilot whales. Sci. Total Environ. 9: 293-297.

STOREY, K.B., and P.W. HOCHACHKA. 1974. Glycolytic enzymes in muscle of the Pacific dolphin: role of pyruvate kinase in aerobic anaerobic transitions during diving. Comp. Biochem. Physiol. 49B: 119-128.

STOUT, C. 1969. Atherosclerosis in exotic Carnivora and Pinnipedia. Am. J. Pathol. 57: 673-687.

STOYANOV, D.P. 1971. Histochemical and ultrastructural changes in lungs of porpoises immunized with corpuscular and dissolved antigens. Tr. Nauchno-Issled. Inst. Epidemiol. Mikrobiol. 15: 113-119. (In Russian)

STRAUGHAN, D. 1972. Biological effects of oil pollution in the Santa Barbara Channel, p. 355-359. In M. Ruivo (ed.) Marine pollution and sea life, Papers FAO Technical conference on marine pollution effects on living resources and fishery, Rome 1970. Fishing News (Books), West Byfleet, Surrey.

STREIBL, M., J. JIROUSOVA, and K. STRANSKY. 1971. Natural waxes. XVII. Composition of sperm oil. Fette Seifen Anstrichm. 73: 301-305.

STROMBERG, K., L. DONNER, C.L. YEE, and P.M. HOWLEY. 1980. Growth potential of sheep and sea mammals cells transformed by SV-40 early region DNA. Proc. Soc. Exp. Biol. Med. 164: 439-444.

STROUD, R. 1975. A case of nephrolithiasis in an adult harbour seal. In Wildlife Disease Association, Proceedings 1975. Annual Wildlife Diseases Conference, Guelph, Ontario, August 20-23, 1975.

STROUD, R.K., T.A. GORNALL, S. JEFFERIES, and B.R. MATE. 1979. Causes of death in marine mammals stranded along the Oregon and Washington coast, p. 57. In Symposium: biology of marine mammals, Abstract. Presentations at the 3rd biennial conference on the biology of marine mammals, October 7-11, 1979, Seattle, WA.

STROUD, R.K., and T. ROFFE. 1979. Causes for death in marine mammals stranded along the Oregon coast. J. Wildl. Dis. 15: 91-98.

STROUD, R.K., and D.R. STEVENS. 1980. Lymphosarcoma in a harbor seal, Phoca vitulina richardii. J. Wildl. Dis. 16: 267-270.

STULKEN, D., and C. KIRKPATRICK. 1955. Physiological investigation of captivity mortality in the sea otter. Trans. N. Am. Wildl. Conf. 20: 476-494.

STULL, J.W., W.H. BROWN, and G.L. KOOYMAN. 1967. Lipids of the Weddell seal, Leptonychotes weddelli. J. Mammal. 48: 642-645.

STUNTZ, W.E. 1981. Preliminary investigations of the possible relationship between passive behaviour by spotted dolphins, Stenella attenuata, and capture stress. Report 1980, NMC-77/25. U.S. Government Printing Office, Washington, DC. (Available from NTIS as PB81-111569: 20 p.) (Gov. Rep. Announce. 1981, 81(2), 191)

SUDERMAN, H.J., W.A. SCHROEDER, and J.R. SHELTON. 1978. Heterogeneity and partial sequences of seal hemoglobins. Can. Fed. Biol. Soc. Proc. 1(21): 149.

SUDERMAN, H.J., and C. YEH-KU. 1971. Hemoglobin of the harp seal: some physicochemical properties. Proc. Can. Fed. Biol. 14: 116.

SUDERMAN, H.J., C. YEH-KU, and K. RONALD. 1973. Hemoglobin of the harp seal (Pagophilus groenlandicus). Zone electrophoresis and isoelectric focusing. Comp. Biochem. Physiol. 45B: 515-522.

SUKHOMLINOV, B.F., M.Z. DATSKIV, and YA.V. TELEGUS. 1974. Physicochemical and structural similarity and differences of carnivore myoglobins. Zh. Evol. Biokhim. Fiziol. 10: 468-472. (In Russian)

SUMICH, J.L. 1983. Swimming velocities, breathing patterns and estimated costs of locomotion in migrating gray whales, Eschrichtius robustus. Can. J. Zool. 61: 647-652.

SUND, P.N. 1975. Evidence of feeding during migration and of an early birth of the California gray whale, Eschrichtius robustus. J. Mammal. 56: 265-266.

SUNDSTROM, G., B. JANSSON, and S. JENSEN. 1975. Structure of phenolic metabolites of p,p'-DDE in rat, wild seal and guillemot. Nature (Lond.) 255: 627-628.

SUNSHINE, P., and M. KRETCHNER. 1964. Intestinal disaccharidases: absence in two species of sea lions. Science (Wash. DC) 144: 850-851.

SUSHKO, A.M., and Z.A. EMIL'YANENKO. 1957. Tryptic activity of sperm whale pancreas. Soobshch. Nauchno-Issled. Rab. Chlenov Primorsk. Otd. Vses. Khim. Ova 3: 135-144. (In Russian)

SUYAMA, M., and M. MARUYAMA. 1969a. Identification of methylated β-alanylhistidine in the muscles of snake and dolphin. J. Biochem. (Tokyo) 66: 405-407.

SUYAMA, M., and M. MARUYAMA. 1969b. Confirmation of carnosine and its methylated compounds in the muscles of some animals. Bull. Jpn. Soc. Sci. Fish. 35: 471-478.

SUYAMA, M., T. SUZUKI, and A. YAMAMOTO. 1977. Free amino acid, and related compounds in whale muscle tissue. J. Tokyo Univ. Fish. 63: 189-196.

SUZUKI, A., T. TSUCHIYA, Y. TAKAHASHI, and H. TAMATE. 1983. Histochemical properties of myofibers in longissimus muscle of common dolphin, Delphinus delphis. Acta Histochem. Cytochem. 16: 223-231.

SUZUKI, N., and T. MITSUHASHI. 1969. Lipid compositions in certain tissues of animals. II. Lipid compositions of the tendon of the sardine whale (Balaenoptera borealis). Yukagaku 18: 909-911.

SUZUKI, T., H. MATSUKAWE, and N. ITO. 1974. Peripheral vasodilating action of peptide derived from fur seal skeletal muscles of different ages and sexes. Bull. Jpn. Soc. Sci. Fish. 40: 1195-1197.

SUZUKI, T., and K. SHIKAMA. 1983. Stability properties of sperm whale oxymyoglobin. Arch. Biochem. Biophys. 224: 695-699.

SVERDRUP, A., and K. ARNESEN. 1952. Investigations on the anterior lobe of the hypophysis of the finback whale. Hvalradets Skr. 36: 5-15.

SVIZHENKO, V.A. 1983. Analysis of spectral characteristics of sound signals in pinnipeds. Vestn. Zool. (2): 63-67. (In Russian)

SWARTZMAN, G.L., and R.T. HAAR. 1983. Interactions between fur seal populations and fisheries in the Bering Sea. U.S. Natl Mar. Fish. Serv. Fish. Bull. 81: 121-132.

SWEENEY, J.C. 1973. Management of pinniped diseases. Proc. Am. Assoc. Zoo Vet. 1973: 141-171.

SWEENEY, J.C. 1974. Common diseases of pinnipeds. J. Am. Vet. Med. Assoc. 165: 805-810.

SWEENEY, J.C. 1974a. Procedures for clinical management of pinnipeds. J. Am. Vet. Med. Assoc. 165: 811-814.

SWEENEY, J.C. 1977. Intratracheal injection of antibiotics in the California sea lion, Zalophus californianus, and bottlenosed dolphin, Tursiops truncatus. J. Wildl. Dis. 13: 49-54.

SWEENEY, J.C. 1978. Reproduction, p. 602-604. In M.E. Fowler (ed.) Zoo and wild animal medicine. W.B. Saunders Co., Toronto, ON.

SWEENEY, J.C., and J.R. GERACI. 1979. Medical care of strandings, p. 275-290. In J.R. Geraci and D.J. St. Aubin (ed.) Biology of marine mammals: insight through strandings. U.S. Mar. Mamm. Comm. Rep. MMC77/13. U.S. Government Printing Office, Washington, DC. (Available from NTIS as PB-293890.)

SWEENEY, J.C., and J.L. MATTSSON. 1974. Surgical attachment of a telemetry device to the dorsal ridge of a yearling California gray whale, Eschrichtius robustus. Mar. Fish. Rev. 36(4): 20-22.

SWEENEY, J.C., and S.H. RIDGWAY. 1975a. Common diseases of small cetaceans. J. Am. Vet. Med. Assoc. 167: 533-540.

SWEENEY, J.C., and S.H. RIDGWAY. 1975. Procedures for the clinical management of small cetaceans. J. Am. Vet. Med. Assoc. 167: 540-545.

TACHIBANA, K., K. AOKI, S. KONDO, H. KABENO, and Y. KOBAYASHI. 1972. Gastrointestinal hormones. 8. Toxicity of a substance extracted from the gastric mucosa of a whale. Oyo Yakuri 6: 31-43.

TAKAGI, M. 1950. Studies on the denaturation of the marine animal protein. 1. On the heat-coagulation of water soluble proteins. Bull. Fac. Fish. Hokkaido Univ. 1: 28-34.

TAKAGI, T., Y. ITABASHI, T. OTA, and K. HAYASHI. 1976. Gas chromatographic separation of wax esters based on the degree of unsaturation. Lipids 11: 354-356.

TAKAGI, T., and Y. ITABASHI. 1977. Random combinations of acyl and alcoholic groups

through overall wax esters of sperm whale head oils. Comp. Biochem. Physiol. 57B: 37-39.

TAKAHASHI, T., T. HASHIMOTO, S. WATANABE, R. HASEGAWA, and I. HARA. 1966. Cardiolipin of fin whale. Yukagaku 15: 148-150.

TAKAO, A., Y. ISIHARA, S. OGAWA, T. KADOYA, and K. NISHINO. 1949. Protease in the stomachs of marine mammals. II. Preparation of whale pepsin. Bull. Jpn. Soc. Sci. Fish. 15: 323-326.

TAKAOKA, M. 1944. Protease of marine animals. Nippon Kagaku Kaishi 65: 490.

TAKAOKA, M., Y. ISHIHARA, and T. HAMAZAKI. 1946. Viscera of marine animals. II. Head oil of a species of dolphin of Hokkaido (Japan). 1. Nippon Nogeikagaku Kaishi 21: 27.

TAKAOKA, M., Y. ISHIHARA, K. SAITO, and A. YOKOYAMA. 1953. Insulin of marine mammals. II. Bull. Jpn. Soc. Sci. Fish. 18: 393-396.

TAKAOKA, M., and I. TSUJINO. 1952. Studies on the body oils of a porpoise, Phocoenoides dalli True, landed in Hokkaido - I. Studies on properties of body oils and their volatile fatty acid. Bull. Jpn. Soc. Sci. Fish. 18: 58-62.

TAKEDA, M., Y. AMANO, and Y. TOYAMA. 1957. The relation between iodine number and refractive index of hydrogenated oil from Cololabis saira and Balaenoptera physalus. Nagoya Sangyo Kagaku Kenkyujo Kenkyu Hokoku 10: 68-69. (In Japanese)

TAKEI, G.H., and G.H. LEONG. 1981. Macroanalytical methods used to analyze tissues of the Hawaiian monk seal, Monachus schauinslandi, for organochlorine pesticides, polychlorobiphenyls and pentachlorophenol. Bull. Environ. Contam. Toxicol. 27: 489-498.

TAKEMURA, K. 1927a. Studies of Cetacea. XXVII. The milk of various species of whales. Jpn. J. Med. Sci. Trans. Abstr. II. Biochem. 1: 131-134.

TAKEMURA, K. 1927b. Studies on Cetacea. XXXI. On synovial fluid of whales. Jpn. J. Med. Sci. Trans. Abstr. II. Biochem. 1: 153-157.

TAMIYA, T., S.M. ARAI, T. TSUCHIYA, and J.J. MATSUMOTO. 1977. Fractionation of ATPase accelerating peptides from fur seal muscle hydrolysate. Bull. Jpn. Soc. Sci. Fish. 43: 869-876.

TAMIYA, T., and J.J. MATSUMOTO. 1979. Nature of adenosine triphosphatase accelerating peptide from hydrolysate of fur seal muscle. J. Biochem. (Tokyo) 86: 1759-1764.

TAMIYA, T., H. MINAGUCHI, S. UTSUGI, T. SUZUKI, and J.J. MATSUMOTO. 1976. Effect of fur seal skeletal muscle hydrolysate peptide on super precipitation and ATPase activity of fish actomyosin. Bull. Jpn. Soc. Sci. Fish. 42: 1299-1304.

TAMIYA, T., M. YOSHIDA, T. TSUCHIYA, M. TANAKA, M. KIKUNO, and J.J. MATSUMOTO. 1977a. Isolation of ATPase accelerating peptides from fur seal muscle hydrolysate. Bull. Jpn. Soc. Sci. Fish. 43: 709-716.

TAMURA, H., and N. UI. 1970. Origin of the multiple components of whale thyroid stimulating hormone. Biochim. Biophys. Acta 214: 566-568.

TAMURA, H., and N. UI. 1972a. Purification and properties of whale thyroid-stimulating hormone. I. Evidence for the presence of multiple components and their origin. J. Biochem. (Tokyo) 71: 201-210.

TAMURA, H., and N. UI. 1972b. Purification and properties of whale thyroid-stimulating hormone. II. Isolation of multiple components. J. Biochem. (Tokyo) 71: 531-541.

TAMURA-TAKAHUSHI, H., and N. UI. 1977. Purification and properties of four biologically active components of whale luteinizing hormone. J. Biochem. (Tokyo) 81: 1155-1160.

TANABE, S., R. TATSUKAWA, N. MARUYAMA, and N. MIYAZAKAI. 1982. Transplacental transfer of polychlorinated biphenyls and chlorinated hydrocarbon pesticides from pregnant striped dolphin, Stenella coeruleoalba, to the fetus. Agric. Biol. Chem. 46: 1249-1254.

TANABE, S., R. TATSUKAWA, H. TANAKA, K. MARUYAMA, N. NOBUYUKI, and T. FUJIYAMA. 1981. Distribution and total burdens of chlorinated hydrocarbons in bodies of striped dolphins (Stenella coeruleoalba). Agric. Biol. Chem. 45: 2569-2578.

TANAKA, K., and M. HATA. 1950. Freezing of whale meat with layers of different heat conductivity on its surfaces. Bull. Jpn. Soc. Sci. Fish. 15: 818-824.

TANAKA, S. 1982. Sighting survey of marine mammals. Trans. Tokyo Univ. Fish. 213-224.

TARASEVICH, M.N. 1968. Food connections of sperm whales in the northern Pacific. Zool. Zh. 47: 595-601. (In Russian)

TARASEVICH, M.N. 1974. Characteristics of white whale migration toward the coast. Translation by National Technical Information Service, U.S. Department of Commerce, Springfield, VA. Report No. NOOT-1: 11 p.

TARASOFF, F.J. 1974. Anatomical adaptations in the river otter, sea otter and harp seal with reference to thermal regulation, p. 111-142. In R.J. Harrison (ed.) Functional anatomy of marine mammals. Vol. 2. Academic Press, London.

TARASOFF, F.J., and D.P. TOEWS. 1972. The osmotic and ionic regulatory capacities of the kidney of harbour seal, Phoca vitulina. J. Comp. Physiol. 81: 121-132.

TARR, H.L.A., B.A. SOUTHCOTT, and P.W. NEY. 1950. Vitamin B_{12} - active substance in fish products. Food Technol. 4: 354-357.

TARUSKI, A.G., C.E. OLNEY, and H.E. WINN. 1975. Chlorinated hydrocarbons in cetaceans. J. Fish. Res. Board Can. 32: 2205-2209.

TATTON, J.C., and J.H.A. RUZICKA. 1967. Organochlorine pesticides in Antarctica. Nature (Lond.) 215: 346-348.

TAVERNER, M.R. 1975. Use of whale meat and whale solubles as dietary protein for growing pigs and their effects on the accumulation of mercury in tissues. Aust. J. Exp. Agric. Anim. Husb. 15: 363-368.

TAVOLGA, W.N. 1983. Theoretical principles for the study of communication in cetaceans. Mammalia 47: 3-26.

TAWARA, T. 1950. On the respiratory pigments of whale (Studies on whale blood. 2.). Sci. Rep. Whales Res. Inst. Tokyo 3.

TAWARA, T., and R. FUKAZAWA. 1950a. Kitol. I. Preparation of kitol from whale liver oil. Bull. Jpn. Soc. Sci. Fish. 15: 707-709.

TAWARA, T., and R. FUKAZAWA. 1950b. Kitol. II. The influence of kitol fraction on the determination of international unit of vitamin A. Bull. Jpn. Soc. Sci. Fish. 15: 710-711.

TAWARA, T., and R. FUKAZAWA. 1950c. Kitol. III. Influences of sunlight, air and heat on vitamin A fraction and the kitol fraction. Bull. Jpn. Soc. Sci. Fish. 15: 712-714.

TAYLOR, F.H.C. 1971. Offshore distribution of Pacific herring (Clupea pallasi) on basis of records from fur seal stomachs. J. Fish. Res. Board Can. 28: 1663-1665.

TAYLOR, F.H.C., M. FUJINAGA, and F. WILKE. 1955. Distribution and food habits of the fur seal of the north Pacific Ocean. U.S. Government Printing Office, Washington, DC.

TAYLOR, R.F., and R.K. FARRELL. 1973. Light and electron microscopy of peripheral blood neutrophils in a killer whale affected with Chediak-Higashi syndrome. Fed. Proc. 32: 207.

TEDMAN, R.A. 1983. Ultrastructure morphology of the mammary gland with observation of the size distribution of fat droplets in milk of the Weddell seal, Leptonychotes weddelli (Pinnipedia). J. Zool. (Lond.) 200: 131-141.

TEDMAN, R.A., and M.M. BRYDEN. 1979. Cow-pup behaviour of the Weddell seal, Leptonychotes weddelli, Pinnipedia, in McMurdo Sound, Antarctica. Aust. Wildl. Res. 6: 19-38.

TEDMAN, R.A., M.M. BRYDEN, and B. GREEN. 1981. Milk intake of Weddell seal estimated by tritiated water and sodium-22 turnover. Antarct. J. U. S. 16: 152-153.

TELFER, N., L.H. CORNELL, and J.H. PRESCOTT. 1970. Do dolphins drink water? J. Am. Vet. Med. Assoc. 157: 555-558.

TEMPLEMAN, W. 1968. Review of some aspects of capelin biology in the Canadian area of the northwest Atlantic. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 158: 41-53.

TEN NOEVER DE BRAUW, M.C., C. VAN INGEN, and J.H. KOEMAN. 1973. Mirex in seals. Sci. Total Environ. 2: 196-198.

TERAO, T., S. YAMASHITA, and T. UKITA. 1970. Inactivation of whale pancreatic ribonuclease ω_1 with iodoacetate. Biochim. Biophys. Acta 198: 45-55.

TESSARO, S.V. 1975. The structure of the brain and the effects of methylmercury in the harp seal, Pagophilus groenlandicus. M.Sc. Thesis, University of Guelph, Guelph, ON. 102 p.

TESSARO, S.V., and K. RONALD. 1976. The lesions of chronic methlymercury poisoning in the harp seal, Pagophilus groenlandicus. Int. Counc. Explor. Sea (I.C.E.S.) Counc. Meet. Mar. Mamm. Comm. 1976/N:7.

TESTA, J.W., J.L. BENGTSON, and D.B. SINIFF. 1981. Population dynamics of Weddell seals, Leptonychotes weddelli, in eastern McMurdo Sound, Antarctic. Antarct. J. U. S. 16: 153.

TETAERT, D., K.K. HAN, M.T. PANCOT, M. DAUTREVAUX, and S. DUCASTAING. 1974. The primary sequence of badger myoglobins. Biochim. Biophys. Acta 351: 317-324.

THEIL, G.B., and M.F. THEIL. 1971. Hemoglobin and myoglobin in mammals, several species of fish and northern whelk (Buccinum undatum). Bull. Mt Desert Isl. Biol. Lab. 11: 94-95.

THEIL, G.B., and M.F. THEIL. 1972. The molecular characteristics of certain mammalian and piscine myoglobins and hemoglobins. Bull. Mt Desert Isl. Biol. Lab. 12: 105-108.

THOBRO, E.S. 1973. Seals tagged in north Atlantic waters, 1967-1972, by Institute of Marine Research Directorate of Fisheries, Bergen, Norway. Int. Comm. Northwest Atl. Fish. (ICNAF) Ser. Pap. 2940.

THOMAS, J.A., and D.P. DE MASTER. 1983. Parameters affecting survival of Weddell seal pups (Leptonychotes weddelli) to weaning. Can. J. Zool. 61: 2078-2083.

THOMAS, J.A., V.B. KEUCHLE, M.J. ROSS, and T.C. EAGLE. 1980. Satellite tracking and automatic position/activity monitoring techniques for the Antarctic cod and Weddell seal. Antarctic J. U. S. 15: 153-154.

THOMAS, J.A., K.C. ZINNELL, and L.M. FERM. 1983. Analysis of Weddell seal, Leptonychotes weddelli, vocalizations using under water playbacks. Can. J. Zool. 61: 1448-1456.

THOMPSON, D. 1978. Seal haven: California marine mammals center. Oceans 11: 59-61.

THOMPSON, J.W., and G. HICKLING. 1973. A bibliography of the literature of the Farne Islands, Northumberland. Trans. Nat. Hist. Soc. Northumberl. Durham Newcastle Upon Tyne 42(1).

THOMPSON, P.C. 1976. Transportation as a constraint to the utilization of marine mammals. Can. Fish. Mar. Serv. Tech. Rep. 651: 46 p.

THOMPSON, P.O., and W.A. FRIEDL. 1982. A long term study of low frequency sounds from several species of whales off Oahu, Hawaii, U.S.A. Cetology 45: 1-19.

THOMPSON, S.Y., and S.K. KON. 1950. Some applications of chromatography in the work of the National Institute for Research in Dairying. VIII. Congress of the International Industry and Agriculture. Brussels 2: 55-63.

THUESEN, W. 1953. The cholesterol content of marine animal oils commercially produced in Norway. Nor. Hvalfangst-Tid. 42: 25-29.

THURMAN, G.D., S.J.T. DOWNES, and S. BARROW. 1982. Anesthetization of a cape fur seal, Arctocephalus pusillus, for the treatment of a chronic eye infection and amputation of a metatarsal bone. J. S. Afr. Vet. Assoc. 53: 255-257.

TILLANDER, M., J.K. MIETTINEN, and I. G. KOIVISTO. 1970. Excretion rate of methyl mercury in the seal (Pusa hispida), p. 303-305. In M. Ruivo (ed.) Marine pollution and sea life. Fishing News (Books) Ltd., West Byfleet.

TILLANDER, M.J., K. MIETINEN, and I. KOIVISTO. 1970a. Excretion rate of methyl mercury in the seal (Pusa hispida). In L. Fribe and J. Vostal (ed.) Mercury in the environment. CRC Press, Inc., Cleveland, OH.

TILLMAN, M.F. 1980. Introduction: a scientific perspective of the bowhead whale problem. Mar. Fish. Rev. 42(9-10): 2-5.

TINOCO, J. 1982. Dietary requirements of α-linolenic acid in animals. Prog. Lipid Res. 21: 1-45.

TINYAKOV, G.G., V.P. CHUMAKOV, and B.A. SEVOSTYANOV. 1973. Some patterns of skin microstructure in cetaceans. Zool. Zh. 52: 399-407. (In Russian).

TINYAKOV, G.G., V.P. CHUMAKOV, and B.A. SEVOSTYANOV. 1975. Microstructure ofsperm whale (Physeter catodon) milk. Zool. Zh. 54: 1413-1415. (In Russian)

TITOVA, M.L. 1958. Digestibility of whale meat by blue Arctic foxes. Byull. Nauchno-Tech. Inf. Nauchno-Issled. Inst. Pushn. Zverovodstva Krolikovodstva 3: 26-27. (In Russian)

TODA, N., and N. SENO. 1970. Sialic acid in the keratan sulfate fraction from whale cartilage. Biochim. Biophys. Acta 208: 227-235.

TODD, A.C.E. 1963. A comparison of Queensland whale meals and fish meal as a protein supplement for grain-fed pigs. Aust. J. Exp. Agric. Anim. Husb. 3: 69-71.

TODD, E.I. 1968. Books and articles on marine mammals. U.S. Fish. Wildl. Serv. Circ. 299. 14 p.

TODD, E.I. 1969. Recent literature on the northern fur seal. Marine Mammal Biology Laboratory, Seattle, WA.

TOLLIN, P. 1969. Determination of the orientation and position of the myoglobin molecule in the crystal of seal myoglobin. J. Mol. Biol. 45: 481-490.

TOMILIN, A.G. 1977. Thermoregulation of periaquatic, semi-aquatic, and aquatic mammals. Byull. Mosk. Ova Ispyt. Prir. Otd. Biol. 82: 49-61. (In Russian)

TOMILIN, A.V. 1946. Lactation and nutrition in cetaceans. Dokl. Akad. Nauk SSSR 52: 277-279. (In Russian)

TOMILIN, A.V. 1957. Mammals of the USSR and adjacent countries. Vol. 9. Cetacea. Akad. Nauk SSSR, Moscow. 756 p. Israel Program for Scientific Translations, Jerusalem, No. 1124, 1967. 717 p.)

TOMILIN, G.B., Y.I. BLIZNYUK, and A.V. ZANIN. 1982. A new nontraumatic method of tagging small cetaceans. Dokl. Biol. Sci. (Eng. Transl. Dokl. Akad. Nauk SSSR) 264: 251-253.

TOWER, D.B., and O.M. YOUNG. 1973. Interspecies correlations of cerebral cortical oxygen consumption, acetylcholinesterase activity, and chloride content. Brains of the fin whale (Balaenoptera physalus) and the sperm whale (Physeter catodon). J. Neurochem. 20: 253-267.

TOWNSEND, C.H. 1935. The distribution of certain whales as shown by logbook records of American whaleships. Zoologica (N.Y.) 19: 1-50.

TOYAMA, Y., and T. TAKAGI. 1962. Eicosapentaenoic, docosapentaenoic and docosahexaenoic

acids in finback whale oil. Fette Seifen Anstrichm. 64: 137-141.

TOYAMA, Y., and H. TAKAI. 1954. Some lesser known aquatic animal oils. J. Oil Chem. Soc. (Japan) 3: 268-269.

TOYOMIZA, M., K. KAWASAKI, and Y. TOMIYASU. 1963. Effect of dietary oil on the fatty acid composition of rainbow trout oil. Bull. Jpn. Soc. Sci. Fish. 29: 957-961.

TRANTER, D.J. 1977a. Further studies of plankton ecosystems in the eastern Indian Ocean. V. Ecology of the Copepoda. Aust. J. Mar. Freshwater Res. 28: 593-626.

TRANTER,D.J., and J.D. KERR. 1977. Further studies of plankton in the eastern Indian Ocean. III. Numerical abundance and biomass. Aust. J. Mar. Freshwater Res. 28: 557-584.

TRANTER, H.A. 1977b. Further studies of plankton ecosystems in the eastern Indian Ocean. VII. Ecology of Amphipoda. Aust. J. Mar. Freshwater Res. 28: 645-662.

TRAVIS, J.C., and B.G. SANDERS. 1972. Whale immunoglobins. II. Heavy chain structure. Comp. Biochem. Physiol. 43B: 637-641.

TRAVIS, J.C., B.G. SANDERS, and J.E. CUSHING. 1971. Electrophoretic properties of haptoglobin and hemoglobin in four species of whales. Comp. Biochem. Physiol. 39B: 299-303.

TRAYLOR, J.G., L.A. DEARDUFF, M. COLETTA, P. ASCENZI, E. ANTONINI, and M.T. BRUNORI. 1983. Reactivity of ferrous heme proteins at low pH. J. Biol. Chem. 258: 12147-12148.

TRILLMICH, F. 1983. Ketamine-xylazine combination for the immobilization of Galapagos sea lions and fur seals. Vet. Rec. 112: 279-280.

TRILLMICH, F., and H. WIESNER. 1979. Immobilization of free-ranging Galapagos sea lions (Zalophus californianus wollebaeki). Vet. Rec. 105: 465-466. (Aquat. Mamm. 7: 26)

TROITSKAYA, O.V. 1968. Comparative study of tryptic and chymotryptic hydrolysates of myoglobins from various animals and man employing the method of peptide maps. Biokhimiya 33: 343-349. (In Russian)

TSUBOKAWA, M., KAWAUCHI, H., and C.H. LI. 1980. Isolation and partial characterization of growth hormone from fin whale pituitary glands. J. Biochem. (Tokyo) 88: 1407-1412.

TSUCHIYA, T. 1943. Highly unsaturated acids. IX. Highly unsaturated acids of liver oil of Delphinus longirostris. Nippon Kagaku Kaishi 64: 299-301. (In Japanese)

TSUCHIYA, T., and R. KANEKO. 1951. The unsaponifiable matter of the fatty substance of sperm whale liver. I. Hydrocarbon. Kogyo Kagaku Zasshi 54: 592-594. (In Japanese)

TSUCHIYA, T., and A. KATO. 1950a. Hydrocarbons in fatty matter of dolphin liver. Kogyo Kagaku Zasshi 53: 305-306. (In Japanese)

TSUCHIYA, T., and A. KATO. 1950b. Highly unsaturated hydrocarbon in fatty matter of finback whales liver. Nippon Kagaku Zasshi 71: 514-515. (In Japanese)

TSUCHIYA, T., and O. OKUBO. 1953. Fatty substance of seal viscera. Kogyo Kagaku Zasshi 56: 187-188. (In Japanese)

TSUCHIYA, T., and A. TANAKA. 1955. Unsaponifiable matter of the fatty substances of sei whale liver. Tokyo Kogyo Shikensho Hokoku 50: 367-369.

TSUJIMOTO, M. 1916. Studies on the Saghalien seal oil. J. Chem. Soc. Jpn Ind. Chem. Sect. 19: 715-723.

TSUJIMOTO, M., and H. KOYANAGI. 1937. On the distillation of pilot whale head oil under reduced pressure. Nippon Kagaku Kaishi 40 (suppl.): 272B-274B. (In Japanese)

TSUKAHARA, K., and Y. YAMAMOTO. 1983. Kinetic studies on the reduction of metmyoglobins by ascorbic acid. J. Biochem. (Tokyo) 93: 15-22.

TSUNOO, S., K. HORISAKA, M. OKAGAWA, and S. TAKAHASHI. 1967. Uber die Histidinverbindungen in Muskulatur und Gesamthirn von Robben Callorhinus ursinus, Phoca richardii pribilofensis sowie Mirounga angustirostris. Jpn. J. Pharmacol. 17: 416-424.

TSUYUKI, H. 1957. On the oils contained in various blubbers of northern elephant seal, Mirounga angustirostris. Sci. Rep. Whales Res. Inst. Tokyo 12: 235-240.

TSUYUKI, H. 1958. Component fatty acids of northern elephant seal oil. Sci. Rep. Whales. Res. Inst. Tokyo 13: 323.

TSUYUKI, H., and S. ITOH. 1966. Studies on the oils contained in blubber of a southern elephant seal. Sci. Rep. Whales. Res. Inst. Tokyo 20: 213-221.

TSUYUKI, H., and S. ITOH. 1969a. Fatty acid composition of finless porpoise oil. Sci. Rep. Whales Res. Inst. Tokyo 21: 131-135.

TSUYUKI, H., and S. ITOH. 1969b. Fatty acid composition of many-toothed pilot whale oil. Sci. Rep. Whales Res. Inst. Tokyo 21: 137-141.

TSUYUKI, H., and S. ITOH. 1970. Fatty acid components of black right whale oil by gas chromatography. Sci. Rep. Whales Res. Inst. Tokyo 22: 165-170.

TSUYUKI, H., and S. ITOH. 1971. Fatty acid components of Ganges River dolphin oil. Sci. Rep. Whales Res. Inst. Tokyo 23: 141-147.

TSUYUKI, H., and S. ITOH. 1972. Fatty acid components of various blubber oils of the Ganges River dolphin. Sci. Rep. Whales Res. Inst. Tokyo 24: 117-125.

TSUYUKI, H., and S. ITOH. 1973. Fatty acid components of blubber oil of the Amazon River dolphin. Sci. Rep. Whales Res. Inst. Tokyo 25: 293-299.

TSUYUKI, H., S. ITOH, U. NARUSE, and A. MOCHIZUKI. 1964. The liver oil of the black right whale (Eubaleana glacialis). Nihon Daigaku No-Juigakubu Gakujutsu Kenkyu Hokoku 18: 17-24.

TSUYUKI, H., and U. NARUSE. 1963. Studies on the oil of black right whale in the northern Pacific Ocean. Sci. Rep. Whales Res. Inst. Tokyo 17: 171-190.

TSUYUKI, H., and U. NARUSE. 1964. Studies on the lipids in the brain of black right whale in the northern Pacific Ocean. Sci. Rep. Whales Res. Inst. Tokyo 18: 173-180.

TURNER, R.N., and K.S. NORRIS. 1966. Discriminative echolocation in a porpoise. J. Exp. Anal. Behav. 9: 535-544.

TVERAAEN, I. 1935. Chemical analysis of blue whale oils. Hvalradets Skr. 11: 5-48.

TWINING, S.S., H. LEHMANN, and M.Z. ATASSI. 1981. Time-dependence study of the antibody response to sperm whale myoglobin: recognition of the antigenic sites is unaltered over an extended period of examination. Mol. Immunol. 18: 473-479.

TYUTYUNNIKOV, B.N., and L.P. GRECHISHNIKOVA. 1965. Low-molecular weight fatty acids in sunflower and cottonseed oils and whale fat. Maslo-Zhir. Promst. 31: 9-12. (In Russian)

TYLER, J.C. 1960. Erythrocytes and hemoglobin in the crabeater seal. J. Mammal. 41: 527-528.

UMMINGER, B.L. 1975. Body size and whole blood sugar concentrations in mammals. Comp. Biochem. Physiol. 52A: 455-458.

UNEO, S., and M. IWAI. 1939. Studies on the Antarctic seal oil. Nippon Kagaku Kaishi 42: 784-786. (In Japanese)

UNEO, S., and K. MATSUSHIMA. 1958. Composition of the oil from Balaenoptera acutorostrata. Yukagaku 7: 341-344.

UNEO, S., and K. TSUCHIKAWA. 1942. Traditional distillation of the saturated fatty acids of highly hydrogenated oils. VII. Composition of the completely hardened oil of the Antarctic finback whales. Nippon Kagaku Kaishi 45: 203-206. (In Japanese)

UNDRUM, T., H. LUNDE, and L.R. GJESSING. 1982. Determination of ophidine in human urine. J. Chromatogr. Biomed. Appl. 227: 53-60.

URMANOV, M.I. 1971. Angioarchitectonics of the liver in seal otter and pinnipeds with reference to the gall-excretion system, p. 247-252. In V.A. Arseniev and E.A. Tikhomiron (ed.) Morski mlekopityushchie (Kotiki i tyleni) Marine mammals (Fur seals and seals). Tr. Vses. Nauchno-Issled. Inst. Morsk. Rybn. Khoz. Okeanogr. 80; Izv. Tikhookean. Nauchnoissled. Inst. Rybn. Khoz. Okeanogr. 82.

U.S. ANTARCTIC PROJECTS OFFICER. 1965. Pesticides found in Antarctic seals and penguins. Bull. U.S. Antarct. Proj. Off. 6(5): 18.

U.S. FISH AND WILDLIFE SERVICE. n.d. Outfit for capturing porpoises and seals. U.S. Fish and Wildlife Service.

U.S. FISH AND WILDLIFE SERVICE. 1958. Selected bibliography of the northern fur seal. U.S. Fish and Wildlife Service.

USAI VIRDIS, V.R., and L. CASOLO PERNECCO. 1977. Glutaminase in ammoniotelic, uricotelic and ureotelic organisms. Boll. Soc. Ital. Biol. Sper. 53: 1867-1870.

USHER, P.J., and M. CHURCH. 1969a. On the relationship of weight, length and girth of the ringed seal (Pusa hispida) of the Canadian Arctic. Arctic 22: 120-129.

USHER, P.J., and M. CHURCH. 1969b. Field table for the calculation of the ringed seal weights from length and girth measurements. Canada Dep. Indian Aff. North Develop. North Sci. Res. Group Tech. Note 3.

U.S. MARINE MAMMAL COMMISSION. 1979. Marine mammal literature: a selected bibliography. U.S. Marine Mammal Commission, Washington, DC.

USPENSKI, S.M., and S.E. BELIKOV. 1976. Research on the polar bear in the USSR, p. 321-323. In J.W. Lentfer, M.R. Pelton and G.E. Folk (ed.) Bears - their biology and management. IUCN (Int. Union Conserv. Nat. Resour.) Publ. New Ser. 40.

USPENSKI, S.M., and A.G. KUPRIYANOV. 1980. Polar bear research and conservation in the USSR, 1975-1976, p. 178-186. In Proceedings of sixth and seventh working meetings of the IUCN Polar Bear Specialist Group. International Union for Conservation of Nature, Gland, Switzerland.

VAGUE, J., and R. FENASSE. 1965. Comparative anatomy of adipose tissue, p. 25-36. In A.E. Renold and G.F. Cahill (ed.) Handbook of physiology. Section 5. Adipose tissue. Williams and Wilkins, Baltimore, MD.

VALLAYATHAN, N.V., J.C. GEORGE, and K. RONALD. 1969. The harp seal, Pagophilus groenlandicus. 5. Levels of hemoglobin from,

certain metabolites and enzymes in the blood. Can. J. Zool. 47: 1193-1197.

VAN DEN HEEDE, J.R., R.C. CRIDDLE, A.I. AHMED, and R.E. FEENEY. 1973. Heart mitochondrial oxidations of an Antarctic fish. Comp. Biochem. Physiol. 46B: 313-319.

VAN DER ZANDE, T., and E. DE RUITER. 1983. The quantification of technical mixtures of polychlorinated biphenyls by microwave plasma detection and the analysis of polychlorinated biphenyls in the blubber lipid from harbour seals, Phoca vitulina. Sci. Total Environ. 27: 133-148.

VAN DE VEN, W.S.M., J.H. KOEMAN, and A. SVENSON. 1979. Mercury and selenium in wild and experimental seals, Halichoerus grypus. Chemosphere 8: 539-556.

VAN DE VERE, J.E. 1975. Replenishment of food species within range of Enhydra lutris nereis, p. 36. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on the biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

VAN DYKE, D., and S.H. RIDGWAY. 1977. Diets for marine mammals, p. 595-598. In M. Rechcigl, Jr. (ed.) Handbook series in nutrition and food, Vol. II, Section G.: Diets, culture media, and food supplements. CRC Press, Cleveland, OH.

VAN FOREEST, A.W. 1978. Experiences and problems with California sea lion (Zalophus californianus) reproduction in Ouwehand Zoo. Aquat. Mamm. 6: 29-32.

VAN GENDEREN, H., K.L. VAN LIER, and J. DE BEUS. 1950. Determination of vitamin A in whale oil and its concentrates. New international standard regulations. Chem. Weekbl. 46: 861-867.

VAN HAAFTEN, J.L. 1962. Diseases of seals in the Dutch coastal waters. Nord. Veterinaermed. 14(Supp. 1): 138-140.

VAN HORN, D.R., and B.E. BAKER. 1971. Seal milk. 2. Harp seal (Pagophilus groenlandicus) milk: effects of stage of lactation on the composition of milk. Can. J. Zool. 49: 1085-1088.

VAN HOVE-HOLDRINET, M. 1979. Confirmation of Mirex and cis- and trans-chlordane in the presence of other organochlorine insecticides and polychlorinated biphenyls. Bull. Environ. Contam. Toxicol. 21: 46-52.

VAN WAGENEN, R.F., M.S. FOSTER, and F. BURNS. 1981. Sea otter, Enhydra lectris, predation on birds near Monterey, California, U.S.A. J. Mammal. 62: 433-434.

VARANASI, U., M. EVERITT, and D.C. MALINS. 1973. Isomeric composition of diisovaleroylglycerides. Specificity for the biosynthesis of the 1,3-diisovaleroylglycerides. Int. J. Biochem. 4: 373-378.

VARANASI, U., H.R. FELDMAN, and D.C. MALINS. 1975. Molecular basis for formation of lipids sound-lens in echolocating cetaceans. Nature (Lond.) 255: 340-343.

VARANASI, U., and D.C. MALINS. 1969. Naturally occurring diol lipids. Dialkoxypentanes in porpoise (Phocoena phocoena) jaw oil. Science (Wash. DC) 166: 1158-1159.

VARANASI, U.S., and D.C. MALINS. 1970a. Unusual wax esters from mandibular canal of the porpose (Tursiops gilli). Biochemistry 9: 3629-3631.

VARANASI, U.S., and D.C. MALINS. 1970b. Ester and ether-linked lipids in the mandibular canal of a porpoise (Phocoena phocoena). Occurrence of isovaleric acid in glycerolipids. Biochemistry 9: 4576-4579.

VARANASI, U.S., and D.C. MALINS. 1971. Unique lipids of the porpoise (Tursiops gilli): differences in triacylglycerols and wax esters of acoustic (mandibullar canal and melon) and blubber tissues. Biochim. Biophys. Acta 231: 415-418.

VARANASI, U.S., and D.C. MALINS. 1972. Triacylglycerols characteristics of porpoise acoustic tissues. Molecular structures of diisovaleryl glyceride. Science (Wash. DC) 176: 926-928.

VARANASI, U.S., and D.C. MALINS. 1974a. Structure of phospholipids and triacylglycerols containing long-chain iso acids in the porpoise Tursiops gilli. Biochim. Biophys. Acta 348: 55-62.

VARANASI, U.S., and D.C. MALINS. 1974b. Distribution and metabolism of wax esters in putative acoustic tissues of cetaceans. Biochem. Soc. Trans. 2: 1277-1279.

VARANASI, U.S., and D.C. MALINS. 1975. Brain lipids from the porpoise (Delphinus delphis). Phosphoglycerides rich in isovaleric acid and long-chain iso-acids. Biochim. Biophys. Acta 409: 304-310.

VARANASI, U.S., D. MARKEY, and D.C. MALINS. 1982. Role of isovaleryl lipids in channeling of sound in the porpoise melon. Chem. Phys. Lipids 31: 237-244.

VERNBERG, F.J. 1976. Pollution effects on marine mammals. An. Acad. Bras. Cienc. 47: 89-93.

VER PLOEG, D.A., E.H. CORDES, and F.R.N. HURD. 1971. Comparison of myoglobin from harbour seal, porpoise and sperm whale. 7. Mechanism and catalyses for addition of cyanide to myoglobins. J. Biol. Chem. 246: 2725-2733.

VERSAGGI, C.S. 1975. Intraosseous architecture and its possible relation to acid-base homeostasis in marine mammals, p. 94, Abstract 198. In American Society of Mammalogists, Abstracts of Technical Papers of the 55th Annual Meeting. University of Montana, 16-19 June, 1975.

VERSAGGI, C.S. 1975a. Intraosseous architecture and its possible relation to acid-base homeostasis in marine mammals, p. 14. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on the biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

VIALE, D. 1978. Evidence of metal pollution in Cetacea of the western Mediterranean. Ann. Inst. Oceanogr. 54: 5-16.

VIALE, D. 1979. Evidence for an excretory function of the skin of certain Odontoceti and Mystoceti cetaceans. J. Exp. Mar. Biol. Ecol. 40: 201-221.

VIALE, D. 1981. Lung pathology in stranded cetaceans on the Mediterranean coasts. Aquat. Mamm. 8: 96-100.

VIBE, C. 1950. The marine mammals and the marine fauna in the Thule District (northwest Greenland) with observations on ice conditions in 1939-1941. Medd. Gronl. 150: 1-117.

VICENTE, N., and D. CHABERT. 1978. Chemical pollutants in blubber tissue in a dolphin aground on the Mediterranean coast. Oceanol. Acta 1: 331-334.

VIGLIERCHIO, D.R.,and J.H. GORTZ. 1972. Hemoglobin derivatives of the zooparasitic nematode, Anisakis physeteris, and the sperm whale host. Exp. Parasitol. 32: 211-216.

VIGNA, R.A., L.J. GURD, and F.R.N. GURD. 1974. California seal lion myoglobins. Complete covalent structure of the polypeptide chain. J. Biol. Chem. 249: 4144-4148.

VILYAMS, N.V., and G.A. MAKHROV. 1935. Study of chemical properties of oil of far eastern ringed seal. Tr. Tsentr. Nauchno-Issled. Inst. Khim Pishch. Sredstv. Narkoms. 4,3(30): 157-167. (In Russian)

VISWANADHAN, V.N., and K. SUNDARAM. 1983. Specificity of spatial clustering of amino acid residues as an evolutionary trend in proteins. Int. J. Pept. Protein Res. 22: 73-77.

VIZSOLYI, E. 1972. Aspects of neurohypophysial physiology during fetal development and pregnancy in the fur seal (Callorhinus ursinus). Ph.D. Thesis, University of British Columbia, Vancouver, BC. (Diss. Abstr. Ser. B. 34(2): 842-B, 1974)

VIZSOLYI, E., and A.M. PERKS. 1969. New neurohypophyseal principle in foetal mammals. Nature (Lond.) 231: 1169-1171.

VIZSOLYI, E., and A.M. PERKS. 1974. Isolation of arginine vasotocin from foetal seal neurohypophyses. Gen. Comp. Endocrinol. 2: 339-340.

VLADIMIROV, V.A. 1983. Reproductive biology of female fur seal of the Urilye Lair Mednyi Island, Russian - SFSR. Byull. Mosk. Ova. Ispyt. Prir. Otd. Biol. 88: 52-61. (In Russian)

VLADIMIRTSEVA, E.A., L.V. AGAFONOVA, S.S. YAMNIKOVA, T.V. PYSINA, T.V. KOVTUN, D.K. L'VOV, and V.M. ZHDANOV. 1981. Comparative study of RNA and protein of antigenically similar human and animal influenza A viruses. Vopr. Virusol. (1): 28-35. (In Russian)

VLADYKOV, V.D. 1944. Etudes sur les mammifères aquatiques. III. Chasse, biologie et valeur économique du marsouin blanc ou beluga (Delphinapterus leucas) du fleuve et du golfe Saint-Laurent. Department of Fisheries, Province of Quebec. 194 p.

VLADYKOV, V.D. 1946. Nourriture de marsouin blanc ou beluga (Delphinapterus leucas) du fleuve Saint-Laurent. Que. Minist. Chasse Pech. Contrib. 17: 157 p.

VLIEGENTHART, J.F.G. 1964. Neurophypophyseal hormones of the finback whale. Proc. K. Ned. Akad. Wet. Ser. B Phys. Sci. 67: 292-294.

VOGL, A.W., and H.D. FISHER. 1976. Glycogen pools on the arterial thoracic retia of the narwhal, Monodon monoceros, and their possible significance. Can. J. Zool. 54: 425-429.

VOGL, A.W., and H.D. FISHER. 1982. Arterial retia related to supply of the central nervous system in two small toothed whale narwhal, Monodon monoceros, and beluga, Delphinapterus leucas. J. Morphol. 174: 41-56.

VON GAVER, P. 1923. Contribution zoologique a l'étude des huiles d'animaux marins. Ann. Marseille Mus. Col. 32: 1-140.

VOOGT, P., and B. DE VRIES. 1968. Isolation of N-β-alanyl-1-methyl-L-histidine from whale meat extract by ligand-exchange, p. 452-459. In Chromatographie, Electrophorese, Symposium, International, 4th 1966. Presses Académiques Européenes, Bruxelles.

VORONOV, V.A. 1982. Frequency time analysis of ultrasonic signals in the dolphin, Phocoena phocoena. Zh. Evol. Biokhim. Fiziol. 18: 578-584. (J. Evol. Biochem. Physiol. 18: 394-399)

VORONOV, V.A., and I.M. STOSMAN. 1982. Sound perception in the dolphin, Phocaena phocaena. J. Evol. Biochem. Physiol. (Engl. Transl. Zh. Evol. Biokhim. Fiziol.) 18: 352-357.

VOTROGOV, L.M., and L.S. BOGOSLOVSKAYA. 1980. Gray whales off the Chukotka Peninsula. Int. Whaling Comm. Rep. Comm. 30: 435-437.

WACKERNAGEL, H. 1968. Substitution and prefabricated diets for zoo animals. Symp. Zool. Soc. Lond. 21: 1-2.

WADA, K. 1971. Food and feeding habit of northern fur seals along the coast of Sanriku. Bull. Tokai. Reg. Fish Res. Lab. 64: 1-37.

WADA, K. 1979. Food and feeding habits of northern fur seal along the coast of Sanriku. U.S. Natl Mar. Fish. Serv., Washington, DC. 69 p.

WADE, L.S. 1975. A sea otter possibly feeding on pismo-clams. J. Mammal. 56: 720-721.

WAGEMANN, R., and D.C.G. MUIR. 1984. Concentrations of heavy metals and organochlorines in marine mammals of northern waters: overview and evaluation. Can. Tech. Rep. Fish. Aquat. Sci. 1279: 97 p.

WAGEMANN, R., N.B. SNOW, A. LUTZ, and D.P. SCOTT. 1983. Heavy metals in tissues and organs of the narwhal (Monodon monocerus). Can. J. Fish. Aquat. Sci. 40(Suppl. 2): 206-214.

WAHNON, E. 1956. Sperm oil - some possible uses. Ing. Chim. (Milan) 38(205): 107-118. (In Italian)

WALDERN, D.E. 1963. Whale solubles as a protein supplement in rations for feeding beef calves. Can. J. Anim. Sci. 43: 182-188.

WALDORF, A., and N.A. VEDROS. 1979. Fatty acid content of depot fat in the northern fur seal (Callorhinus ursinus). J. Wildl. Dis. 15: 573-577.

WALKER, G.E., and J.K. LING. 1980. Body weights and dimensions of adult female Australian sea lions, Neophoca cinerea. J. Mammal. 61: 164-165.

WALKER, T.A., J.L. BETZ, J. OLAH, and N.R. PACE. 1975. Nucleotide sequence of dolphin and bovine 5S-ribosomal ribonucleic acid. FEBS Lett. 54: 241-244.

WALLIS, M. 1981. The molecular evolution of pituitary growth hormone, prolactin and placental lactogen: a protein family showing variable rates of evolution. Mol. Evol. 17: 10-18.

WANG, M.-Y.R., B.M.HOFFMAN, S.J. STEVEN, and F.R.N. GURD. 1979. Oxygen binding to myoglobins and their cobalt analogs. J. Am. Chem. Soc. 101: 7394-7397.

WARN, N.D. 1965. Histology of reproduction and the estrus cycle in maturing female fur seals, Callorhinus ursinus. B.Sc. Thesis, University of British Columbia, Vancouver, BC.

WARTZOK, D., G.C. RAY, and H.B. MARTIN. 1975. A recording instrument package for use with marine mammals. Rapp. P.-V. Reun. Cons. Int. Explor. Mer 169: 445-450.

WASSERMAN, K., and A.H. McKENZIE. 1956. Plasma volume, cardiac output and circulation time studies on the seal (Phoca vitulina) during the dive reflex. Bull. Tulane Univ. Med. Fac. 16: 105-113.

WATANABE, H., and K. SUZUKI. 1950a. Chemical composition of various parts of sperm whale. Bull. Jpn. Soc. Sci. Fish. 15: 735-740.

WATANABE, H., and K. SUZUKI. 1950b. Chemical composition of various parts of whale. Bull. Jpn. Soc. Sci. Fish. 15: 741-744.

WATERWORTH, D.G. 1964. Nutritive quality and available amino acid composition of some animal protein concentrates. Brit. J. Nutr. 18: 503-517.

WATKINS, W.A. 1975. Right whale feeding and baleen rattle, p. 40. In Symposium: biology and conservation of marine mammals, Proceedings of the 1st conference on the biology and conservation of marine mammals, University of California, Santa Cruz, December 4-7, 1975. Abstracts.

WATKINS, W.A. 1981. Activities and underwater sounds of fin whales (Balaenoptera physalus). Sci. Rep. Whales Res. Inst. Tokyo. 33: 83-118.

WATKINS, W.A., and W.E. SCHEVILL. 1979. Aerial observation of feeding behaviour in four baleen whales, Eubalaena glacialis, Balaenoptera borealis, Megaptera novaeangliae and Balaenoptera physalus. J. Mammal. 60: 155-163.

WATKINS, W.A., and W.E. SCHEVILL. 1982. Observations of right whales, Eubalaena glacialis, in Cape Cod, Massachusetts, U.S.A. waters. U.S. Natl Mar. Fish. Serv. Fish. Bull. 80: 875-880.

WATKINS, W.A., D. WARTZOK, H.B. MARTIN, and R.R. MAIEFSKI. 1980. A radio whale tag, p. 227-241. In F.P. Diemer, E.J. Vernberg and D.Z. Hirkes (ed.) Advanced concepts in ocean measurements for marine biology. University of South Carolina Press, Columbia, SC.

WATSON, A.P., and D.E. GASKIN. 1983. Observations on the ventilation cycle of the harbour porpoise, Phocoena phocoena, in coastal waters of the Bay of Fundy. Can. J. Zool. 61: 126-132.

WATSON, L. 1981. Sea guide to whales of the world. Dutton, New York, NY. 302 p.

WATT, G. 1952. An experiment in marking the grey seal (Halichoerus grypus). Nature (Lond.) 169: 883.

WEBER, R.E., and J. QVIST. 1981. Functional and molecular identity of haemoglobins from fetal and maternal Weddell seals (Abstract). Acta Physiol. Scand. 112(2): 18A.

WEBSTER, R.G., V.S. HINSHAW, W.J. BEAN, K.L. VAN WYKE, J.R. GERACI, D.J. ST. AUBIN, and G. PETURSSON. 1981. Characterization of an influenza A virus from seals. Virology 113: 712-724.

WEDMID, G.Y. 1975. Characterization of isovaleroyl lipids in cetacean fats. Nuclear magnetic resonance spectroscopy of isovaleryl triglycerides using lanthanide shift reagents. Ph.D. Thesis, Rutgers State University (Diss. Abstr. Int. Ser. B 36(2): 705, 1975)

WEDMID, G.Y., and C. LITCHFIELD. 1976. Positional analysis of triglyceride using proton magnetic resonance with $Eu(fod)_3$ and $Pr(fod)_3$ shift reagents: II. Cetacean triglycerides. Lipids 11: 189-193.

WEDMID, G., C. LITCHFIELD, R.G. ACKMAN, and J.C. SIPOS. 1972. Heterogeneity of lipid composition within the cephalic melon tissue of the pilot whale. J. Am. Oil Chem. Soc. 48: 322A.

WEDMID, G.Y., C. LITCHFIELD, R.G. ACKMAN, J.C. SIPOS, C.A. EATON, and D. MITCHELL. 1973. Heterogeneity of lipid composition within the cephalic melon tissue of the pilot whale (Gobicephala melaena). Biochim. Biophys. Acta 326: 439-447.

WELLENDORF, M. 1963. Composition of spermaceti. Nature (Lond.) 198: 1086-1087.

WELLINGTON, G.M., and S. ANDERSON. 1978. Surface feeding by a juvenile gray whale, Eschrichtius robustus. U.S. Natl Mar. Fish. Ser. Fish. Bull. 76: 290-293.

WELLS, R.M.G. 1978. Observation of the hematology and oxygen transport of the New Zealand fur seal, Arctocephalus forsteri. N. Z. J. Zool. 5: 421-424.

WELLS, R.M., and S.O. BRENNAN. 1979. Oxygen equilibrium properties of isolated hemoglobins from the Weddell seal, Leptonychotes weddelli. Comp. Biochem. Biophys. 63A: 365-368.

WEST, G.C., J.J. BURNS, and M. MODAFFERI. 1979a. Fatty acid composition of blubber from the four species of Bering Sea phocid seals. Can. J. Zool. 57: 189-195.

WEST, G.C., J.J. BURNS, and M. MODAFFERI. 1979b. Fatty acid composition of Pacific walrus skin and blubber fat. Can. J. Zool. 57: 1249-1255.

WHEELER, J.F.G. 1929. Changes in the condition of the blubber of blue and fin whales. Rep. Br. Assoc. Adv. Sci. 1928: 563-564.

WHITE, F.N., and D.K. ODELL. 1971. Thermoregulatory behaviour of the northern elephant sea lion (Mirounga angustirostris). J. Mammal. 52: 758-774.

WHITE, J.C.D. 1953. Composition of whales' milk. Nature (Lond.) 171: 612.

WHITE, J.R. 1970. Thiamine deficiency in an Atlantic bottlenosed dolphin, Tursiops truncatus, on a diet of raw fish. J. Am. Vet. Med. Assoc. 157: 559-562.

WHITE, R.G., R.D. CAMERON, and L.K. MILLER. 1971. Fresh water ingestion and water flux in a captive harbour seal, Phoca vitulina. Proc. Alaska Sci. Conf. 22: 136.

WHITEHEAD, H. 1983. Structure and stability of humpback whale, Megaptera novaeangliae, groups off Newfoundland, Canada. Can. J. Zool. 61: 1391-1397.

WHITEHEAD, H., and M.J. MOORE. 1982. Distribution and movements of West Indian humpback whales, Megaptera novaeangliae, in winter. Can. J. Zool. 60: 2203-2211.

WHITEHEAD, H., R. SILVER, and P. HARCOURT. 1982. The migration of humpback whales, Megaptera novaeangliae, along the northeast coast of Newfoundland, Canada. Can. J. Zool. 60: 2173-2179.

WHITTOW, G.C. (ed.) 1967. Comparative physiology of thermoregulation. Academic Press, London.

WHITTOW, G.C. 1973. Evolution of thermoregulation, p. 202-258. In G.C. Whittow (ed.) Comparative physiology of thermoregulation. Vol. 3. Special aspects of thermoregulation. Academic Press, London.

WHITTOW, G.C., D.T. MATSUURA, and Y.C. LIN. 1972. Temperature regulation in the California sea lion, Zalophus californianus. Physiol. Zool. 45: 68-77.

WHITTOW, G.C., D.T. MATSUURA, and C.A. OHATO. 1975. Physiological and behavioural temperature regulation in the California sea lion, (Zalophus californianus). Rapp. Cons. Int. P.-V. Reun. Explor. Mer 169: 477-480.

WILBER, C.G. 1948. A study of blood and tissue lipids of Arctic animals in relation to post hibernation fat depletion. Arct. Inst. N. Am. Prog. Rep.

WILBER, C.G. 1952. Fur seal blubber. J. Mammal. 33: 483-485.

WILBER, C.G. 1954. The lipids in the tissues of Arctic animals. Army Chem. Cent. Chem. Corps Med. Lab. Spec. Rep. 39: 1-27.

WILBER, C.G., and X.J. MUSACCHIA. 1950. A comparative study of lipids in Arctic marine mammals. J. Mammal. 31: 162-167.

WILHEM, H.S., and H. TASTALDI. 1964. Tocopherols in some vegetable and animal oils. Rev. Fac. Farm. Bioquim. Univ. Sao Paulo 2: 53-60.

WILKE, E. 1957. Food of sea otters and harbour seals at Amchitka Island. J. Wildl. Manage. 21: 241-242.

WILKE, F. 1958. Fat content of fur seal milk. Murrelet 39: 40.

WILKE, F., and K.W. KENYON. 1952. Notes on the food of fur seal, sea lion and harbour

porpoise. J. Wildl. Manage. 16: 396-397.

WILKE, F., and K.W. KENYON. 1954. Migration and food habits of the northern fur seal. Trans. N. Am. Wildl. Conf. 19: 430-440.

WILKE, F., and K.W. KENYON. 1957. The food of fur seals in the eastern Bering Sea. J. Wildl. Manage. 21: 237-238.

WILLIAMS, G. 1981. Dietary deficiencies of captive dolphins. Prog. Lipid Res. 20: 259-260.

WILLIAMS, G., B.C. DAVIDSON, P. STEVENS, and M.A. CRAWFORD. 1977. Comparative fatty acid of the dolphin and herring. J. Am. Oil Chem. Soc. 54: 328-330.

WILLIAMS, J.P.G. 1968. Glycogen in the epidermis of the dolphin, Tursiops truncatus. Experientia 24: 183.

WILLIAMS, K.A. 1949. The analysis of fatty oils with hydrocarbons. J. Assoc. Off. Agric. Chem. 32: 668-672.

WILLIAMS, K.C., and W.J. NATOLI. 1972. A comparison between soybean meal, fishmeal and whale solubles in isonitrogenous barley and sorghum grain based diets for growing pigs. Proc. Aust. Soc. Anim. Prod. 9: 415-420.

WILLIAMS, N.V., and G.A. MAKHROV. 1935. A chemical study of seal oil. Tr. Tsentr. Nauchno-Issled. Inst. Khim. Pishch. Sredstv. 4: 157.

WILLIAMS, T.D., and L.T. PULLEY 1983. Haematology and blood chemistry in the sea otter, Enhydra lutris. J. Wildl. Dis. 19: 44-47.

WILLIAMS, T.D., and D.B. SINIFF. 1983. Surgical implantation radiotelemetry devices in the sea otter. J. Am. Vet. Med. Assoc. 183: 1290-1291.

WILSON, J.P.F., and T.J. PITCHER. 1979. Feeding and behaviour of a killer whale, Orcinus orca, in the Foyle estuary, Ireland. Ir. Nat. J. 19: 352-354.

WILSON, P.N., and D.F. OSBOURN. 1960. Compensatory growth after undernutrition in mammals and birds. Biol. Rev. 35: 324-363.

WINDOM, H.L. 1972. Arsenic, cadmium, copper, lead, mercury and zinc in marine biota - north Atlantic Ocean, p. 121-148. In Baseline studies of pollutants in the marine environment (heavy metals, halogenated hydrocarbons and petroleum). I.D.O.E. workshop on baseline studies, Brookhaven National Laboratory, 24-26 May, 1972.

WINTER, G., and W.J. NUNN. 1950a. The component fatty acids of the elephant seal oil. J. Sci. Food Agric. 1: 18-21.

WINTER, G., and W.J. NUNN. 1950b. The component fatty acids of elephant seal oil: the distribution in the body. J. Sci. Food Agric. 1: 311-314.

WINTER, G., and W.J. NUNN. 1950c. The composition of leopard seal blubber fat. J. Sci. Food Agric. 1: 314.

WINTER, G., and W.J. NUNN. 1953a. The composition of the blubber fat of crabeater seal. J. Sci. Food Agric. 4: 439-442.

WINTER, G., and W.J. NUNN. 1953b. The component fatty acids of elephant seal oil: variations and relationship to blubber fats and other seals. J. Sci. Food Agric. 4: 442-448.

WINTERS, G.H. 1978. Production, mortality, and sustainable yield of northwest Atlantic harp seals (Pagophilus groenlandicus). J. Fish. Res. Board Can. 35: 1249-1261.

WINTERS, G.H., and J.E. CARSCADDEN. 1978. Review of capelin ecology and estimation of surplus yield from predator dynamics. Int. Comm. Northwest Atl. Fish. Res. Bull. 12: 21-30.

WIRTZ, W.O. 1968. Reproduction, growth and development and juvenile mortality in the Hawaiian monk seal. J. Mammal. 49: 229-238.

WO, C.K.W. 1973. The nutritional status of Alaskan Eskimos with respect to fatty acids, vitamin A and vitamin E. Ph.D. Thesis, University of Illinois, Urbana, IL. (Diss. Abstr. Int. Ser. B. 34: 6091B-6092B, 1974)

WO, K.W., and H.H. DRAPER. 1973. Plasma vitamin E levels in the northern Alaskan Eskimo (Abstract). Fed. Proc. 32(3, Part 1): 943.

WOLK, E., and G.M. KOSYGIN. 1979. A haematological study of the walrus, Odobenus rosmarus. Acta Theriol. 24: 99-107.

WOLLENBERGER, A., E.G. KRAUSE, and B.E. WAHLER. 1958. Orthophosphate and phosphocreatine content of the heart. Naturwissenschaften 45: 294.

WOLMAN, A.A., and A.J. WILSON, Jr. 1970. Occurrence of pesticides in whales. Pestic. Monit. J. 4: 8-10.

WOOD, F.G. 1978. Annotated bibliography from the Navy's marine mammal program. Naval Ocean Syst. Cent. Publ. Aff. Off., San Diego, CA. Code 032. 32 p.

WOOD, F.G. 1980. Annotated bibliography of publications from the U.S. Navy's marine mammal program. Update 1 July 1980. Naval Ocean Systems Center, San Diego, CA. 45 p.

WOOD, F.G. 1983. Annotated bibliography of publications from the Navy's marine mammal program. Naval Ocean Systems Center, San Diego, CA.

WOODHOUSE, C.D., P.W. COLLINS, and F.G. HOCHBERG. 1979. Marine mammal strandings in the Santa Barbara channel region from 1975

to 1977, p. 69-71. In J.R. Geraci and D.J. St. Aubin (ed.) Biology of marine mammals: insights through strandings. U.S. Mar. Mamm. Comm. Wash., DC., Rep. MMC-77/13. (Abstract). U.S. Government Printing Office, Washington, DC. (Available from NTIS as PB-293890.)

WOODMAN, H.E., and R.E. EVANS. 1948. The composition and nutritive value, when fed to pigs, of whale meat meal, whitefish meal, feeding-meat meal, extracted decorticated ground-nut meal, bean meal and dried yeast. J. Agric. Sci. 38: 200-206.

WOODWARD, D.R. 1976. The chemistry of mammalian casein: a review. Dairy Sci. Abstr. 38: 137.

WORTHY, G.A.J. 1981. Changes in energy stores during neonatal development in the harp seal, Phoca groenlandica. Northwest Atl. Fish. Organ. Sci. Counc. Res. (NAFO/SCR), Doc. 81/XI/161, Ser., N469: 9 p.

WORTHY, G.A.J. 1981a. Body size and composition of harp seals, Phoca groenlandica, during the post-weaning period, p. 127. In Symposium: biology of marine mammals, Abstract. 4th biennial conference on the biology of marine mammals, December 14-18, 1981, San Francisco, CA. University of California, Santa Cruz, National Marine Mammal Laboratory, Naval Ocean Systems Center.

WORTHY, G.A.J. 1982. Energy sources of harp seals, Phoca groenlandica, duringthe post-weaning period. M.Sc. Thesis, University of Guelph, Guelph, ON. 100 p.

WORTHY, G.A.J., and D.M. LAVIGNE. 1981. Energy utilization of harp seals, Phoca groenlandica, during the post-weaning period. Northwest Atl. Fish. Organ. Sci. Counc. Res. (NAFO/SCR), Doc. 81/XI/164, Ser., N472: 11 p.

WORTHY, G.A.J., and D.M. LAVIGNE. 1981a. Post-weaning growth of the harp seal, Phoca groenlandica. Northwest Atl. Fish. Organ. Sci. Counc. Res. (NAFO/SCR), Doc. 81/XI/163, Ser. N471: 37 p.

WORTHY, G.A.J., and D.M. LAVIGNE. 1981b. Changes in blood properties of fasting and feeding harp seal pups, Phoca groenlandica after weaning. Northwest Atl. Fish. Organ. Sci. Counc. Res. (NAFO/SCR), Doc., 81/XI/159, Ser., N467. 19 p.

WORTHY, G.A.J., and D.M. LAVIGNE. 1982. Changes in blood properties of fasting and feeding harp seal pups, Phoca groelandica, after weaning. Can. J. Zool. 60: 586-592.

WORTHY, G.A.J., and D.M. LAVIGNE. 1983. Energetics of fasting and subsequent growth in weaned harp seal pups, Phoca groenlandica. Can. J. Zool. 61: 447-456.

WORTHY, G.A.J., D.M. LAVIGNE, and W.D. BOWEN. In Press. Post-weaning growth. In D.M. Lavigne, K. Ronald and R.E.A. Stewart (ed.) The harp seal. W. Junk, The Hague (Perspect. Vertebr. Sci.)

WORTMAN, J.D., and M.D. LARUE. 1974. Hand weaning of polar bear cubs, Thalarctos maritimus, at Topeka Zoo. Int. Zoo Yearb. 14: 215-218.

WURSIG, B. 1976. Radio tracking of dusky porpoises (Lagenorhynchus obscurus) in the south Atlantic: preliminary analysis. ACMRR Scientific Consultation on Marine Mammals. Bergen, Norway. 21 p.

WURSIG, B., and M. WURSIG. 1977. The photographic determination of group composition and stability of coastal porpoises (Tursiops truncatus). Science (Wash. DC) 198: 755-756.

WURSIG, B., and M. WURSIG. 1979. Behavior and ecology of the bottlenose dolphin, Tursiops truncatus, in the south Atlantic. U.S. Natl Mar. Fish. Serv. Fish. Bull. 77: 399-412.

WYNSTON, L.K., C.A. FREE, and J.G. PIERCE. 1960. Further chromatographic studies on beef thyrotropin and comparison of beef, sheep and whale thyrotropins. J. Biol. Chem. 23: 85-90.

XU, H., S. JIA, Z. LI, and W. HUANG. 1983. The minke whale from the northern Yellow Sea. Acta Zool. Sin. 29: 86-92.

YADAEV, N.A., Y.A. PANKOV, A.A. BULATOV, and T.A. OSIPOVA. 1982. Amino acid sequence of sei whale, Balaenoptera borealis, somatotropin. Biochemistry (Engl. Transl. Biokhimiya) 47: 881-890.

YAMADA, K. 1946. Chemical studies on the fatty layers of whale hides. I. The distribution of fat in corium layers. Contrib. Cent. Fish. Stn Jpn. 1946: 12-13.

YAMAGAWA, M., and N. NAKAMURA. 1926. Chemical study on the marine mammal. III. 1. On the pancreas of the whale insulin. J. Imp. Fish. Inst. (Jpn) 22: 26-28.

YAMAGAWA, M., and S. YASAKA. 1926. Chemical study of the marine mammal. IV. 1. On the inner organs of the whale. a. Spleen and pancreas of Iwashi-Kujira, Balaenoptera borealis (Lesson). J. Imp. Fish. Inst. (Jpn) 22: 35-36.

YAMAGAWA, M., and Y. SHIBUYA. 1926. Chemical study on the marine mammal. II. Hydrolysis of the muscular protein of the whale, Nagasu-Kujira, Balaenoptera physalus (Linnaeus). J. Imp. Fish. Inst. (Jpn) 22: 23-24.

YAMAUCHI, I. 1976. Differences in the milk constituents of various mammals. Taisha 13: 565. (In Japanese)

YANURA, S., H. SHIGETA, M. SUZUKI, Y. ABE, M. ISHII, K. AOKI, and K. TACHIBANA. 1972. Gastrointestinal hormones. 9. Tertatogenic effects of a substance extracted from the

gastric mucosa of a whale, mice and rats. Oyo Yakuri 6: 45-60.

YASUGI, E., T. KASAMA, H. KOJIMA, and T. TAMAKAWA. 1983. Occurrence of 2-O-acylgalactosyl ceramide in human and bovine brains. J. Biochem. (Tokyo) 93: 1595-1600.

YASUGI, E., E. SAITO, T. KASAMA, H. KOJIMA, and T. YAMAKAWA. 1982. Occurrence of 2-O-acyl galactosyl ceramide in whale brain. J. Biochem. (Tokyo) 91: 1121-1128.

YAYANOS, A.A. 1968. The temperature dependence of the viscosity of heparinized blood of red fox, spotted seal, reindeer, tomcod and Arctic char, p. 138-141. In R.V. Alpha Helix Bering Sea Expedition, Project Reports of the R.V. Alpha Bering Sea Expedition, February to October, 1968. Phase A. National Science Foundation, Washington, DC., National Institute of Health, Washington, DC.

YAZAWA, T. 1933. Untersuchungen über Cetacea. XLII. Über die Extraktivstoffe des Muskels. Jpn. J. Med. Sci. 2. 2: 37-41.

YAZAWA, T. 1935. Weiteres über Stickstoffverbindungen im Finwalmuskel (Untersuchungen über Cetacea, XLV). Jpn. J. Med. Sci. 2. 3: 15-17.

YONE, Y., and T. TOMIYAMA. 1953. Antianemic ingredients of the liver. II. Estimation of antianemic potency in the livers of several marine animals. Bull. Jpn. Soc. Sci. Fish. 17: 33-37.

YONEDA, T. 1974. Preparation and properties of sei whale carboxypeptidase A. Bull. Fac. Fish. Hokkaido Univ. 25: 61-67.

YONEDA, T. 1980. Amino acid composition and the protein form procarboxyl peptidase A purified from the pancreas of the sei whale, Balaenoptera borealis. Comp. Biochem. Physiol. 67B: 81-86.

YORK, A.E. 1983. Average age at first reproduction of the northern fur seal (Callorhinus ursinus). Can. J. Fish. Aquat. Sci. 40: 121-127.

YOSHIDA, M., H. HOSHII, K. KOSAKA, and H. MORIMOTO. 1965. Nutritive value of various energy sources for poultry feed. II. Nutritive value of fatty acid of sperm whale. Jpn. Poult. Sci. 2: 191-199.

YOSHIDA, S., and A. NAKAMURA. 1977. Studies on PCB pattern in breast milk of Swedes. Proc. Osaka Prefect. Inst. Public Health Ed. Food Sanit. 8: 67-71.

YOSHIDA, S., and A. NAKAMURA. 1979. Residual status after parturition of methylsulfone metabolites of polychlorinated biphenyls in the breast milk of a former employee in a capacitor factory. Bull. Environ. Contam. Toxicol. 21: 111-115.

YOSHIMURA, H., O. YAGASAKI, and T. TAKEWAKI. 1972. Significance of catecholamine in acetylcholine release during stretching of the intestinal wall. Folia Pharmacol. Jpn. 68: 90P-91P.

YOSHIZAWA, Z. 1964. A new type of heparin "ω-heparin" isolated from whale organs. Biochem. Biophys. Res. Commun. 16: 336-341.

YOUNG, C.R., and M.Z. ATASSI. 1982. Antibodies to sperm whale myoglobin evoked by free synthetic peptides of an antigenic site. Immunol. Commun. 11: 9-16.

YOUNG, C.R., and M.Z. ATASSI. 1983. T lymphocyte recognition of sperm whale myoglobin recognition of synthetic peptides carrying antigenic site 5 by myoglobin primed T cells. J. Immunogenet. (Oxf.) 10: 139-150.

YOUNG, C.R., and M.Z. ATASSI. 1983a. T lymphocyte recognition of sperm whale myoglobin responses of T cells from mouse strains primed with synthetic peptide carrying antigenic site 5 and relation to antigen presentation. J. Immunogenet. (Oxf.) 10: 151-160.

YOUNG, C.R., and M.Z. ATASSI. 1983b. T lymphocyte recognition of sperm whale myoglobin specificity of T cell recognition following neonatal tolerance with myoglobin or synthetic peptides of an antigenic site. J. Immunogenet. (Oxf.) 10: 161-170.

YOUNG, C.R., H.E. SCHMITZ, and M.Z. ATASSI. 1983c. Antibodies with preselected specifities to protein regions evoked by immunization with free synthetic peptides dose response to myoglobin antigenic sites reveal an optimum dose for each antigenic site. Immunol. Commun. 12: 419-428.

YOUNG, R.A. 1976. Fat, energy, and mammalian survival. Am. Zool. 16: 699710.

YUKHOV, V.L. 1971. Some data on the feeding of sperm whales in the high latitudes of Antarctica. Tr. Atl. Nauchno-Issled. Inst. Rybn. Khoz. Okeanogr. 39: 54-59. (In Russian)

YURKOWSKI, M., and H. BROCKERHOFF. 1966. Fatty acid distribution of triglycerides determined by deacylation with methyl magnesium bromide. Biochim. Biophys. Acta 125: 55-59.

ZAMA, K. 1963. Phospholipids of aquatic animals. Mem. Fac. Fish. Hokkaido Univ. 2: 73p.

ZAMA, K., and H. IGARASHI. 1956. The phosphatide of aquatic animals. VI. The brain cephalins of sperm whale (Physeter catodon). Nippon Nogeikagaku Kaishi 30: 435-438. (In Japanese)

ZAMA, K., and H. IGARASHI. 1957. The phosphatides of aquatic animals. XII. Cephalins and lecithins of the brain of a rorqual

(Balaenoptera borealis). Nippon Nogeikagaku Kaishi 31: 582-585. (In Japanese)

ZAMA, K., and H. IGARASHI. 1959a. Phosphatide of aquatic animals. XV. Phosphatidyl serine and phosphatidyl ethanolamine. Nippon Nogeikagaku Kaishi 33: 333-335. (In Japanese)

ZAMA, K., and H. IGARASHI. 1959b. Phosphatide of aquatic animals. XVI. Inositol phosphatide. Nippon Nogeikagahu Kaishi 31: 336-338. (In Japanese)

ZAPOL, W.M., G.C. LIGGINS, R.C. SCHNEIDER, J. QVIST, M.Y. SNIDER, R.K. CREASY, and P.W. HOCHACHKA. 1979. Regional blood flow during simulated diving in the conscious Weddell seal. J. Appl. Physiol. 47: 968-973.

ZASYPKIN, M.YU. 1982. Glyoxalase polymorphism in seals. Genetika 18: 2058-2059. (In Russian)

ZEMSKII, V.A. 1958. Morphological adaptations in newborn finback whales from the Antarctic. Tr. Vses. Nauchno-Issled Inst. Morsk. Rybn. Khoz. Okeanogr. 33: 179-185. (In Russian)

ZENKOVICH, B.A. 1938. Milk of large-sized cetaceans. Dokl. Akad. Nauk SSSR 20: 203. (In Russian)

ZENKOVITCH, B.A. 1970. Whales and plankton in Antarctic waters, p. 183-185. In M.W. Holdgate (ed.) Antarctic ecology. Vol. 1. Academic Press, New York, NY.

ZETTNER, A. 1974. Some hematologic observations on the California gray whale. Mar. Fish. Rev. 36(4): 22-24.

ZHIRMUNSKII, A.V., E.V. KRASNOV, and M.V. PROPP. 1980. American-Soviet symposium on physiology and biochemistry of adaptations in marine mammals. Biol. Morya (Vladivosk.) (1): 89-90. (In Russian)

ZIMUSHKO, V.V. and M.V. IVASHIN. 1980. Some results of Soviet investigations and whaling of gray whales (Eschrichtius robustus, Lilljeborg, 1861). Int. Whaling Comm. Rep. Comm. 30: 237-246.

ZIMUSHKO, V.V., and S.A. LENSKAYA. 1970a. Feeding of the gray whale, Eschrichtius gibbosus, at foraging grounds. Sov. J. Ecol. (Engl. Transl. Ekologiya) 3: 205-212.

ZIMUSHKO, V.V., and S.A. LENSKAYA. 1970b. Feeding of the gray whale, Eschrichtius gibbosus, at foraging grounds. Eksp. Khir. Anesteziol. 1: 26-35. (In Russian)

ZITKO, V. 1975. Aromatic hydrocarbons in aquatic fauna. Bull. Environ. Contamin. Toxicol. 14: 621-631.

ZOOLOGICAL SOCIETY OF LONDON. 1978. Species of mammals bred in captivity during 1976 and multiple generation births. Int. Zoo Yearb. 18: 390.

ZUBCHENKO, I.A. 1977. Biosorption in aquatic animals. Gidrobiol. Zh. 13(4): 60-67. (Hydrobiol. J. 13(4): 51-57)

TAXONOMIC INDEX

MARINE MAMMALS

Abegglen et al. 1963 (Products; technology); Ackman et al. 1970 (Food; lipid; fatty acid composition of food, role of food web; N. Atlantic; krill, Meganyctiphanes norvegica & Thysanoessa inermis); Ackman & Castell 1966 (Food; lipid; herring, isomeric monoenoic fatty acids in oil); Ackman & Eaton 1966a (Food; lipid; herring, fatty acid composition of oil), 1967 (Food; lipid; Meganyctiphanes norvegica & Pandalus borealis, fatty acid composition); Ackman et al. 1967a (Food; lipid; herring, turbot & sable fish, fatty acid composition of oils; iodine value); Ackman & Eaton 1971 (Food; lipid; Ammodytes americanus, lipids & fatty acid composition of oils); Ackman & Hansen 1967 (Food; lipid; occurrence of pristane & pristanic acid diastereomers); Ackman et al. 1969 (Food; lipid; capelin, fatty acid composition); Ackman & Jangaard 1963 (Lipid; fatty acid identification); Addison 1982 (Lipid; toxic compounds; bibliography; review; organochlorine compounds & marine lipids); Adolph 1951 (Thermoregulation; compare cold and warm blooded animals); Amoroso & Matthews 1952b (Nutrition; milk and lactation); Anderson 1946 (Bibliography; Canadian mammals), 1969 (Special topic; biology; book); Antezana 1970 (Food; euphausiids, Chile); Avigan et al. 1966 (Food; lipid; pathway of degradation of phytanic acid (α-decarboxylation); Backhouse 1964 (Anesthesia; small animals); Baker & Nevenzel 1971 (Lipid; enzyme; wax ester lipase); Banfield 1974 (Special topic; list of Canadian mammals); Barnard 1959 (Food; epipelagic & under-ice amphipods, central Arctic Basin); Baslow 1965 (Protein; neurosine (N-acetyl-L-histidine); identification & distribution); Beare-Rogers 1977 (Lipid; fatty acids; docosenoic acid); Behrisch 1973 (Thermoregulation; molecular mechanisms of temperature adaptation to Arctic ecotherms & heterotherms); Belkovitch 1965 (Thermoregulation; particular features of aquatic environment); Bernhard et al. 1969 (Lipid; lenses); Bjornhag et al. 1979 (Carbohydrate & energetics; lipid; protein; proximate composition; milk and lactation; composition (lactose; lipid; protein) of milk correlates with growth); Bligh & Armstrong 1971 (Toxic compounds; Hg pollution, Canada); Blix 1976 (Diving; metabolic consequences of submersion asphyxia); Blumer et al. 1964 (Food; lipid; pristane in marine environment); Blumer & Thomas 1965a (Food; lipid; phytadienes in zooplankton); Blumer & Thomas 1965 (Lipid; isomeric C_{19} monoolefin from marine zooplanktons); Botelho et al. 1978 (Myoglobins); Brankley & Cornelius 1974 (Care; veterinary science and comparative medicine); Brockova 1971 (Vitamin; vitamin A content in liver); Brookes & Forrest 1973 (Care; chloropromazine metabolism; interspecies variations); Brown 1976 (Evolution & taxonomy; protein; evolution of serum albumin; population studies); Bryden 1972a (Nutrition;

special topic; growth & development); Buckley et al. 1979 (Food; upwelling oceanic structure at edge of Arctic ice); Bullock & Ridgeway 1972 (Biological sonar; neurophysiological findings); Bullough 1951 (Reproduction; sexual cycle); Burns et al. 1980 (Special topic; relationship of distribution, density & activities to sea ice conditions); Cahalane 1947 (Special topic; mammals of N. America; book); Canadian Arctic Resources Committee 1980 (Special topic; marine traffic forecast in N.W. passage; appendix); Canivenc 1960 (Reproduction; ovum implantation); Carpenter 1977 (Food; plankton ecosystem; Indian Ocean); Castellini 1981 (Diving; biochemical adaptation for diving); Chalmers et al. 1970 (Protein; enzyme; brain glutamic acid decarboxylase); Chiarelli & Capanna 1973 (Taxonomy & evolution; cytotaxonomy & vertebrate evolution); Christiansen et al. 1969 (Special topic; carbohydrate & energetics; uncoupling & recoupling of oxidative phosphorylation in brown adipose mitochondria); Clements 1971 (Lipid; lipid chemistry of lungs); Crandall 1964 (Care; in captivity); Cushing 1964 (Evolution & taxonomy; haematology; blood groups); Daniel 1968 (Reproduction; delayed implantation; electrophoresis of uterine fluid); Davis 1961 (Food; special topic; workshop); Davis et al. 1980 (Special topic; present & future management of mammals in Canadian Arctic); Dawbin 1955 (Food; subantarctic marine food cycles & relation to discontinuous plankton); De Baar et al. (Food; lipid; vertical flux of fatty acids in N. Atlantic Ocean); Delcourt 1969 (Lipid; electrophoresis of lipoproteins); Department of Agriculture 1979 (Special topic; care; humane handling, care, treatment & transportation); Domart et al. 1955 (Lipid; fatty acid fractionation with urea); Dunbar 1968 (Special topic; ecological development of polar regions; book), 1977 (Special topic; evolution of polar ecosystem), 1973 (Special topic; stability & fragility in Arctic ecosystem), 1981 (Special topic; physical cause & biological significance of polynyas & other open water in sea ice; Canadian Arctic); Dyerberg & Jorgensen 1982 (Lipid; bibliography; Inuit; review; marine oils & thrombogenesis); Eckstein et al. 1959 (Reproduction; endocrinology; physiology of ovum implantation); Elsner 1969 (Diving; cardiovascular adjustment to a dive); Elsner et al. 1966 (Diving; cardiovascular defenses against asphyxia); Enders 1963 (Reproduction; endocrinology; delayed implantation); Engelhardt 1983 (Toxic compounds; thermoregulation; bibliography; review; oil spill on thermoregulation, dermal toxicity, neurotoxicity & hemotoxicity); Eremeev 1930 (Products; lipid; fat production); Evans 1959 (Milk & lactation; milk composition); Fay 1974 (Special topic; food; role of ice in ecology); Finley & Renaud 1980 (Special topic; marine mammals inhabiting Baffin Bay north water in winter); Firth & Hicks 1973 (Molting; interspecies variation in fine structure & enzyme histochemistry of transitional epithelium); Fiscus 1980 (Food; salmon); Fisher et al. 1974 (Evolution & taxonomy; haematology; enzymes; erythrocyte inorganic pyrophosphatase isozymes); Fogg 1970 (Food; nutrition; biological productivity in Antarctic); Folkow 1982 (Diving; adaptation of circulation to dive); Fritsch et al. 1974 (Thermoregulation; insulation of furs); Frost 1979 (Thermoregulation; regulation of nonshivering; thermogenesis in brown adipose); Frost et al. 1978 (Food; special topic; offshore demersal fish & epibentic invertebrates N.W. Chukchi & W. Beaufort Seas); Gale 1973 (Endocrinology; thermoregulation; bibliography; neuroendocrine aspects of thermoregulation; review); Gamble 1979 (Special topic; Arctic offshore development; circumpolar challenge); Geraci 1968 (Vitamin; nutrition; thiamine deficiency in captivity), 1977 (Care; manual), 1978 (Special topic; care; zoo & wild animal medicine), 1981 (Care; handbook); Geraci & Keyes 1970 (Care; veterinary medicine in conservation and management); Geraci & St. Aubin 1980 (Toxic compounds; offshore petroleum resource development & marine mammals; review & research recommendations); George & Paul 1970 (Food; special topic; biological investigation of deep sea & under-ice benthos of Arctic Ocean); Gill & Coues 1877 (Bibliography; N. American mammals); Gitlin & Boesman 1967 (Protein; fetal-specific serum proteins; A-fetoprotein); Grekova 1968 (Enzyme; endocrinology; effect of hydrocortisone & insulin on the hexokinase activity in liver); Gouw & Vlugter 1967 (Biological sonar; lipid; physical properties of triglyceride; ultrasonic sound velocity); Grainger et al. 1980 (Special topic; food; food web studies in Brevoort Harbor; E. Baffin I.; mysids, coelenterates, amphipods, pteropods & ctenophores); Griner 1974 (Care; diseases of zoo animals); Grodsky & Forsham 1966 (Endocrinology; insulin); Guard & Murrish 1975 (Haematology; effect of temperature on viscosity of blood); Gulliver 1845 (Haematology; size of red corpuscles); Gulyas & Daniel 1967 (Endocrinology; incorporation of labelled nucleic acid & protein precursors by diapausing & nondiapausing blastocytes); Hachiya et al. 1973 (Endocrinology; pituitary & blood thyrotropin); Hall & Kelson 1959 (Special topic; mammals of N. America; book); Hallgren & Larsson 1963 (Food; lipid; herring, pristane); Hamlett 1935 (Reproduction; delayed implantation; discontinuous development in mammals); Hansen 1968 (Lipid; 4,8,12-trimethyltridecanoic acid); Hansen & Meiklen 1970 (Food; lipid; phytanic acid, pristane & 4,8,12-trimethyltridecanoic acid in Euphausia superba; diatoms are a source of phytol); Harrison 1969b (Reproduction; reproductive organs), 1972 (Special topic; functional anatomy; book, Vol. 1), 1974 (Special topic; functional anatomy; book, Vol. 2); Harrison & King 1965 (Special topic; book; general); Hart 1964 (Thermoregulation; insulation & metabolic adaptation to cold); Hart & Fisher 1964 (Thermoregulation; adaptation to polar environment); Hay & Watson 1976 (Vitamin; protein; plasma transports proteins of 25-hydroxycholecalciferol); Hayashida 1969 (Endocrinology; pituitary growth hormone); Heller 1956 (Vitamin; tocopherol & vitamin A in blubber); Helminen et al. 1973 (Toxic compounds; PCB in Finnish environment); Herlant 1971 (Endocrinology; function of gonatropes & report on hypothalmo-hypophysis); Hilditch 1956 (Lipid; chemical constituents of fat); Hill 1978 (Special topic; effects of underwater shock waves); Hochackha 1981 (Carbohydrate & energetics; diving; diving metabolic & physiological mechanisms); Hochachka & Murphy 1979 (Diving; carbohydrate & energetics; metabolic status during diving & recovery); Hochachka & Somero 1973 (Special topic; diving; carbohydrate & energetics; strategies of biochemical adaptation); Hochachka & Storey 1975 (Diving; metabolic consequences of diving); Horner 1977 (Food; special topic; history & recent advances in study of ice

biota); Hubbard 1969a (Special topic; care; use of mammals in biomedical research), 1969b (Special topic; formation of a study center), 1969c (Care; chemotherapy of captive); Hull 1966 (Special topic; thermoregulation; structure & function of brown adipose); Hustad et al. 1971 (Biological sonar; lipid; acoustic properties of some lipids); IATA 1975 (Special topic; care; live animals regulation; air transport); International Council for Exploration of the Sea 1974 (Bibliography); Irving 1935a (Mineral; salt excretion), 1938 (Diving; change in blood flow through brain & muscle during arrest in breathing), 1939 (Diving; respiration in diving), 1957 (Thermoregulation; usefulness of Scholander's views on adaptive insulation of animals), 1964a (Carbohydrate & energetics; gas transport mechanism), 1964b (Thermoregulation; maintenance of warmth), 1967 (Diving, thermoregulation), 1968 (Thermoregulation; adaptation to cold), 1969 (Thermoregulation; temperature regulation), 1970 (Thermoregulation; morpho-physiological adaptation to life in polar area), 1972 (Thermoregulation; Arctic life); Irving & Krog 1954 (Special topic; thermoregulation; body temperature), 1955 (Thermoregulation; skin temperature as regulator of heat), 1957 (Carbohydrate & energetics; thermoregulation; metabolism in Alaskan mammals in winter & summer); Irving et al. 1957 (Lipid; melting point of animal fats in cold climates), 1935b (Carbohydrates & energetics; metabolism in summer & winter), 1940 (Diving; physiology of diving); Jackson et al. 1939 (Protein; urinary nitrogen distribution; Carnivora); Jangaard et al. 1967 (Milk & lactation; seasonal changes in fatty acid composition of milk fat); Jansky 1971 (Thermoregulation; preparation of body organs during nonshivering heat production); Jenkinson 1973 (Special topic; physiology of sweating); Jenness 1974 (Milk & lactation; composition of milk); Jenness & Sloan 1970 (Milk & lactation; composition of milk from various spp.); Johansen 1969 (Thermoregulation; adaptive response to cold in arterial smooth muscles for heterothermic tissues); Johnsen et al. 1969 (Care; nutrition; nutritional & health requirements for keeping animal colonies); Jones et al. 1972 (Toxic compounds; Hg, Tay region); Juul 1967 (Special topic; enzymes; stability of plasma enzymes during storage); Kalenas 1952 (Vitamin C level in plasma); Keyes 1971 (Care; pathology); Kizvetter 1953 (Lipid; oil); Kleiber 1965 (Carbohydrate & energetics; respiratory exchange & metabolic rate); Knowles & Vollrath 1974 (Special topic; neuro secretion); Koeman 1973 (Toxic compounds; PCB); Koeman et al. 1975 (Toxic compounds; Hg, Se & CH_3Hg); Koeman & van Genderen 1966 (Toxic compounds; chlorinated hydrocarbon residues, preliminary notes); Kooyman & Anderson 1969 (Diving; deep diving); Kooyman et al. 1981a (Diving; bibliography; physiology of diving; review); Korzhuev 1952 (Haematology; protein; forms of localizations & quantity of hemoglobin of blood of different animals); Koski & Davis 1979 (Special topic; distribution of mammals; Baffin Bay & area); Kreps 1941 (Diving; physiology); Kretchmer 1971 (Enzyme; carbohydrate & energetics; lactose & lactase); Krogh 1939 (Mineral; osmotic regulation), 1941 (Carbohydrate and energetics; physiology of respiratory mechanism); Kulu 1972 (Taxonomy & evolution; evolution & cytogenetics); Kupke et al. 1979 (Haematology; special topic; lipid; protein; differences in lipid & lipoprotein concentration in venous capillary blood); Kuznetsov 1962 (Lipid; fat deposition & its effect on animals ecology); Lamson et al. 1951 (Anaesthesia; modification of barbituate anaesthesia by glucose, intermediary metabolites & certain other substances); Lanby 1980 (Special topic; bibliography; review on neoplasia); Lanman 1970 (Endocrinology; delayed implantation of blastocysts; its effect on developing embryo); Lauer & Baker 1969b (Mineral; milk & lactation), 1972 (Protein; milk & lactation; milk casein electrophoresis); Lawrence & Dougherty 1981 (Toxic compounds; polychlorinated dibenzofurans); Laws 1956 (Nutrition; reproduction; growth & seasonal maturity); Lenfant 1969a (Haematology; physiological properties of blood); Lewis 1964 (Protein; haematology; plasma protein), 1973 (Haematology; variation of fibrogens from animals to clump Staphlococci), 1975 (Haematology; comparative hematology; platelets), 1976 (Haematology; cross immunoreactivities of fibrogens); Ling 1970 (Molting; pelage & molting); Linzell & Peaker 1971 (Milk & lactation; bibliography; mechanism of milk secretion; review); Litchfield 1972 (Lipid; analysis of triglycerides); Lovern 1964 (Lipid; review); Lowry et al. 1982 (Food; special topic; feeding habits, food requirements & status; Bering Sea); Lydekker 1895 (Special topic; handbook of British mammals); MacLean 1968 (Lipid; correlation of stereoisomers in present day & ancient isoprenoid fatty acids); Malins & Varanasi 1975 (Biological sonar; review; bibliography; biochemistry of acoustic tissues); Malins & Wekell 1970 (Lipids; review; lipid biochemistry); Martin et al. 1971 (Special topic; radio tracking methods in open sea); Matsumoto 1972 (Enzyme; ATPase activating substance from muscle hydrolysate); Mawdesley-Thomas 1974 (Special topic; aspects of neoplasia); Mayr 1963 (Taxonomy & evolution; animal spp. & evolution); McConnaughey & McRoy 1979 (Special topic; food web structure); McDonald 1914 (Bibliography; Pribilof Islands, Alaska); McKay 1970 (Special topic; biomedical telemetry); McLaren & Mansfield 1960 (Special topic; netting; Belcher I. experiment); McWilliam 1977 (Food; plankton ecosystem; E. Indian Ocean; Euphausiacea); Mills & Taylaur 1971 (Haematology; lipid; protein; distribution & composition of serum lipoproteins of 18 animals); Mishima et al. 1977 (Mineral; trace metal concentration in tissues; Syowa Station); Miyagawa & Ueno 1958 (Product; vitamin; vitamin B content of liver meal & liver extracts); Mize et al. 1966 (Lipid; metabolism of phytol-UC-14 & phytanic acid-U-C-14); Mohl 1980 (Special topic; noise); Moore 1977 (Food; special topic; inorganic particulate sea particulates); Mortelsman 1971 (Anaesthesia; wild animals); Mrosovsky 1981 (Lipid; reproduction; milk & lactation; body fat during pregnancy & lactation); Naevdal 1971 (Protein; haematology; taxonomy & evolution; serological studies); Nedergaard et al. 1983 (Lipid; thermoregulation; dietary essential fatty acids on active thermogenin content of brown adipose (rat)); Neilands 1947 (Enzyme; vitamin; thiaminase, aquatic animals of Nova Scotia; Canada); Nelson 1972a (Lipid; haematology; quantitative analysis of blood lipids), 1972b (Lipid; haematology; lipid composition & metabolism of erythrocytes); Nicol 1967 (Special topic; biology; book); Nishimura 1926 (Endocrinology; chemical study, adrenals); Norris 1969 (Biological sonar; echolocation); Numachi 1970

(Evolution & taxonomy; carbohydrate & energetics; enzyme; lactate & malate dehydrogenase isozyme patterns); Orr 1972 (Special topic; California); Oritsland 1974 (Thermoregulation; windchill & solar radiation index for homeotherms); Palimeter 1969 (Milk & lactation; carbohydrate & energetics; what regulates lactose content in milk?); Patashnik & Kangas 1971 (Care; nutrition; pasteurization of whole fish ration of captive); PCB Conference 2 1973 (Toxic compounds); Pedersen & Gray 1972 (Thermoregulation; lipid; physiologically induced loose-coupling of brown adipose mitochondria to endogenous fatty acids & adenosine phosphates); Pierce 1970 (Special topic; metabolic chamber; design & operation); Pilson 1967 (Milk & lactation); Prosser 1967 (Thermoregulation; molecular mechanisms of temperature adaptation); Prosser & Brown 1961 (Special topic; comparative physiology); Raymont 1963 (Food; plankton & productivity; book); Rewell & Willes 1950 (Special topic; tumors); Rhodes 1975 (Haematology; biochemistry profile of animals); Rice & Scheffer 1968 (Special topic; bibliography; list of marine mammals of the world); Ridgway 1972a (Care; special topic; bibliography; biology & medicine; book); Ridlington et al. 1981 (Protein; mineral; metallothionein; characterization of metal-binding proteins of tissues); Risebrough 1978 (Toxic compounds; special topic; bibliography; literature review & research recommendations); Robinson et al. 1969 (Haematology; Hagemann factor (factor 12) deficiency); Rzhavskaya & Alekseeva 1966 (Lipid; unsaponifiable fraction in fat); Rzhavskaya & Dubrovskaya 1973 (Lipid; determination of polyunsaturated fatty acids); Schevill et al. 1967 (Anaesthesia; immobilizing drugs lethal to swimmers); Schmidt-Nielson & Flood 1933 (Lipid); Scholander 1940 (Diving; carbohydrates & energetics; respiratory function in diving), 1962 (Diving; physiological adaptation to diving); Scholander et al. 1950a (Thermoregulation; body insulation in the Arctic); Schroeder & Wegeforth 1935 (Special topic; gastric ulcer occurrence, their etiology & pathology; California coast); Schusterman 1980 (Biological sonar; behavioral methodology in echolocation); Scow et al. 1973 (Milk & lactation; lipid; incorporation of dietary fatty acid into milk triglycerides; mechanism & regulation); Seal 1969 (Haematology; evolution & taxonomy; hemoglobin; systematics); Seal & Doe 1966 (Endocrinology; reproduction; protein; corticosteroid binding of globulin in pregnancy); Seal & Erickson 1969 (Anaesthesia; immobilization; phencyclidine; promazine); Sekerak et al. 1979 (Food; special topic; studies of plankton in N.W. Baffin Bay & adjacent waters, July-October, 1978); Seki & Saito 1971 (Nucleic acid; nucleotides in hepatic tissues; quantitative comparisons); Selander & Johnson 1973 (Evolution & taxonomy; review; genetic variations among spp.); Siegmund 1959 (Protein; treatment of proteins); Simpson 1945 (Special topic; evolution & taxonomy; principles of classification; classification), 1970 (Toxic compounds; observation on effects of pollution); Simpson & Gardner 1972 (Special topic; comparative microscopic anatomy); Siversten 1934 (Milk & lactation; chemical composition); Sjöstrand 1962 (Haematology; blood volume; handbook); Slijper 1956 (Reproduction; remarks on gestation & birth); Smith 1974 (Toxic compounds; symposium; marine environmental implications of offshore oil drilling in the E. Gulf of Mexico); Smith & Rigby 1981 (Special topic; distribution of polynyas in Canadian Arctic); Smith & Horwitz 1969 (Thermoregulation; brown fat & thermogenesis); Smith et al. 1979 (Special topic; studies in S.W. Baffin I.); Soevik & Braekkan 1981 (Mineral; products); Spellenberg 1975 (Food; penguins); Squires 1969 (Food; decapod crustaceans; Beaufort and Arctic waters of Cambridge Bay, 1960-65); Stirling 1980 (Special topic; biological importance of polynyas of Canadian Arctic); Stirling & Calvert 1983 (Toxic compounds; special topic; environmental threats to mammals in Canadian Arctic); Stirling & Cleator 1981a (Special topic; polynyas in Canadian Arctic); Stirling et al. 1981 (Special topic; polynyas); Stirling & Smith 1977 (Special topic; interrelationship of Arctic Ocean mammals in the sea habitat); Takagi 1950 (Protein; product; heat coagulated water; soluble proteins); Tanaka 1982 (Food; sighting; survey); Usai Virdis & Casolo Pernecco 1977 (Enzyme; protein; glutaminase in ammoniotelic, uricotelic & ureotelic organisms); Vague & Fenasse 1965 (Special topic; handbook on physiology; adipose tissue); Van Dyke & Ridgway 1977 (Food; care; diets; handbook series of nutrition & food); von Gaver 1923 (Lipid); Wackernagel 1968 (Care; nutrition; substitution & prefabricated diets in zoo animals); Wagemann and Muir 1984 (Toxic compounds; heavy metals & organochlorines; overview & evaluation); Wallis 1981 (Endocrinology; evolution & taxonomy; molecular evolution of pituitary; growth hormone; prolactin & placental lactogen; variable rates of evolution); Wartzok et al. 1975 (Special topic; recording instrument package); Whittow 1967 (Thermoregulation; comparative physiology & thermoregulation), 1973 (Thermoregulation; taxonomy & evolution; evolution of thermoregulation); Wilber 1948 (Lipid; haematology; blood & tissue lipids in relation to post-hibernation fat depletion), 1954 (Lipid; in tissues); Willson & Osburn 1960 (Nutrition; compensatory growth after undernutrition); Windom 1972 (Toxic compounds; As, Cd, Cu, Pb, Hg & Zn in biota of N. Atlantic Ocean); Wood 1983 (Bibliography; annotated); Woodward 1976 (Milk & lactation; protein; bibliography; chemistry of casein; review); Yamauchi 1976 (Milk & lactation; milk constituents; differences among mammals); Yoshimura et al. 1972 (Endocrinology; catecholamine in acetylcholine release during stretching of intestinal wall); Young 1976 (Lipid; carbohydrate & energetics; special topic; fat; energy & survival); Zaitseva et al. 1963 (Nucleic acid; enzyme; nucleotide composition of soluble ribonuclease acid form of some spp.).

CETACEA

Abe et al. 1965 (Carbohydrate & energetics; heparin; anticoagulant activity and its characteristics), 1968 (Carbohydrate & energetics; heparin; anticoagulant activity and its clinical application); Ackerfors 1979 (Special topic; production in the sea); Ackman et al. 1974 (Lipid; can food chain be detected with fatty acids from depot & organ fats?); Addison 1976 (Toxic compounds; organochlorines); Agawa et al. 1956 (Vitamin A in liver); Akiya et al. 1949 (Enzyme; protein; protease & tryptase characterization in digestive organs); Alimova & Moiseenko 1963 (Lipid; odd-numbered saturated and

branch-chain fatty acids); Allden et al. 1954 (Products; protein; condensed solubles in pig & poultry feed); Alzieu & Duguy 1978 (Toxic compounds; organochlorines; France), 1979 (Toxic compounds; Delphinidae; Physeteridae; Balaenopteridae; PCB, DDT, DDE & DDD in blubber, muscle, liver, kidney, stomach & in unborn); Andreev 1978 (Special topic; cytology of dolphins); Anonymous 1966 (Lipid; catch & oil production); Arnason et al. 1977 (Nucleic acid; 3 Mystoceti; 7 Odontoceti; DNA); Asper 1975 (Special topic; techniques of live capture of small spp.); Baltes 1968 (Products; composition of meat extract; water, PO_4, total N & amino acids); Baluda et al. 1972 (Haematology; taxonomy and evolution; electrophoresis of hemoglobins; 9 spp.); Bannister & Baker 1967 (Food; special topic; observation on food & feeding; Durban); Bartlett & Moulder 1976 (Toxic compounds; bibliography; pesticide pollution); Bennich et al. 1957 (Protein; carbohydrate & energetics; milk & lactation; casein; amino acid composition; carbohydrate content); Berner 1952 (Vitamin; liver); Birchard et al. 1978 (Toxic compounds; effects of oil spill); Bjornhag et al. 1979 (Carbohydrate & energetics; lipid; protein; proximate composition; milk & lactation; composition of milk (lipid; protein; lactose) correlates with growth rate in post-natal period); Blix 1975 (Diving; metabolic aspects); Blumer et al. 1963 (Lipid; pristane; source is Calanus finmarchicus, C. glacialis & C. hyperboreus); Bodrov et al. 1958 (Care; technique & technology of treatment); Borisov 1969a (Protein; haematology; taxonomy & evolution; comparative analysis of serum albumins), 1969b (Protein; haematology; taxonomy & evolution; comparative antigenic properties of serum proteins), 1969c (Protein; haematology; evolution & taxonomy; serological analysis); Botelho & Gurd 1978 (Myoglobins; 12 cetaceans & 2 pinnipeds); Bottino 1971 (Lipid; fatty acid composition of oil); Bowes & Jonkel 1975 (Toxic compounds; PCB's; food chain; Arctic & subarctic); Bradshaw et al. 1969a (Myoglobin; isolation & characterization of tryptic peptides of myoglobins of sperm whale & porpoises); Bradshaw & Gurd 1969 (Myoglobin; amino acid sequences of porpoise & sperm whale myoglobins); Bradshaw et al. 1969b (Myoglobin; isolation & characterization of tryptic peptides of porpoise myoglobins); Braekkan 1949 (Vitamin; vitamin A determination in liver); Brandt 1940 (Products; endocrinology; hormones & vitamin A in thyroid, ovaries, corpus luteus, testes, spleen, kidney, placenta, thyroid & prostate); Brierem 1949 (Products; meal fed to dairy cows); Brodie 1975 (Carbohydrates & energetics; an overview of intraspecific size variation); Brown et al. 1960 (Care; health problems in captive dolphins); Brown & Norris 1956 (Care; observation of captive & wild); Brown & Rawlins 1926 (Product; lipid; deposition of polyunsaturated fatty acids in rat depot fats); Brown 1976 (Evolution & albumin); Bukin & Skorobogatova 1951 (Product; vitamin; source of liver vitamin A); Bullock et al. 1968 (Biological sonar; electrophysiological studies of central auditory mechanisms); Burkhardt et al. 1934 (Lipid; special topic; pigment in oil); Caldwell & Caldwell 1971 (Special topic; sounds produced by stranded, Florida); Carola 1957 (Lipid; chemical & physical properties of oil); Carpenter et al. 1955 (Product; feed for chicks); Carter 1968 (Bibliography, 1900-1964), 1973 (Bibliography, 1965-1972); Celliers 1961 (Mineral; proximate composition; protein; fat, ash, fiber, Mn, Fe, Ca, Co, Cl, P, Cu, Mg, K & Na); Case 1978 (Nutrition; taxonomy & evolution; evolution & adaptive significance of post-natal growth rates); Cavagnolo 1979 (Haematology; immunology); Chang et al. 1972 (Product; endocrinology; stomach gastrone preparation; inhibits gastric ulcers); Clarke et al. 1978 (Special topic; observations & marking; coast of Chile 1964); Clough et al. 1947 (Lipid; vitamin; vitamin A & sterols in liver oil); Cmelik 1950 (Lipid; oil of dolphin's body); Cockrill 1951 (Product; meat), 1960 (Care; special topic; pathology; veterinary study); Colgrove et al. 1975 (Care; dolphin's necrotic stomatitis; disease); Combs et al. 1954 (Product; growth factor of solubles used in feed of chicks); Cordes 1982 (Care; special topic; cause of stranding); Cornell et al. 1981 (Haematology; clinical application & haematological values of captive); Corner 1975 (Toxic compounds; fossil fuel hydrocarbons; chemical & biochemical properties); Cortes 1952 (Vitamin; nicotinic acid determination in tissues); Creach 1955 (Lipid; physiological properties of saponifiable fraction); Cunningham 1935 (Vitamin; vitamin D content in blubber); Cushing 1963 (Evolution & taxonomy; haematology; blood groups & systematics); Dammers 1952 (Product; condensed-solubles as pig food); Darglotz et al. 1978 (Molting; carbohydrates & energetics; O_2 consumption by skin & problem of cutaneous respiration of dolphins); Dean 1947a (Product; lipid; use of dolphin oil), 1947b (Lipid; product; physical & chemical properties of oil); Dedyukhina et al. 1979 (Lipid; product; intramuscular lipids in meat; fatty acid composition of phospholipids; nutritional values), 1980 (Product; myoglobin; oxidation of myoglobin & lipid in defrosted meat); De Heus & DeMan 1951 (Product; vitamin; vitamin B_{12} content in condensed-solubles); De Jong & Goodman 1982 (Taxonomy & evolution; protein; phylogeny studied by sequence analysis of eye lens proteins, α-crystallin); De Iongh et al. 1965 (Lipid; product; oil on serum lipids of man); De Master 1979 (Reproduction; average age of first birth); De Monte & Pilleri 1968a (Protein; haematology; hemoglobin plasma-protein fractions determined by microelectrophoresis; hemoglobin, albumin & prealbumin in Delphinidae); Denton 1963 (Special topic; bouyancy mechanisms); Dolgopolskaya 1964 (Food; nutrition; dolphins; eat decapods in Black Sea); Dubois et al. 1948 (Enzyme; mineral; carbohydrate & energetics; distribution & acid-soluble P & certain enzymes in tissues; carbohydrate intermediary metabolism; cytochrome oxidase, succinic dehydrogenase, malic dehydrogenase & ATPase of heart, muscle & brain of dolphin); Duinker & Hillebrand 1983 (Toxic compounds; composition of PCB mixtures in biotic & abiotic marine compartments; Dutch Wadden Sea); Efremov 1977 (Vitamin; review; vitamin A and D in lipids); Egorova & Kryuchkova 1967 (Proximate composition; vitamin, vitamin B_{12} content in tissues); Eichelberger et al. 1940a (Haematology; mineral; water; distribution of water & electrotytes in blood of dolphins), 1940b (Milk & lactation; proximate composition; dolphin's milk); Engelhardt 1979 (Haematology; hematology & plasma chemistry of captive), 1983 (Toxic compounds; thermoregulation; bibliography; review; oil spill on thermoregulation, dermal toxicity, neurotoxicity & hemotoxicity); Evans 1973 (Bio-

logical sonar; echolocation of freshwater dolphin), 1974 (Special topic; radio telemetric studies of odontocetes); Evans et al. 1972 (Special topic; methods of tagging small spp.); Fangauf & Deditius 1934 (Product; meal); Fay et al. 1979 (Special topic; post-mortem procedures); Fladmark 1951 (Product; oil & food products); Flanagan et al. 1983 (Myoglobin; dolphins; baleen & beaked whales); Flyger 1964 (Anaesthesia; succinylcholine chloride for killing & capturing); Foll 1953 (Product; nutritive value; protein, vitamin, minerals & energy of meal); Ford 1964 (Product; available amino acids in meat); Fordyce 1982 (Evolution & taxonomy; dental anomaly in a fossil & evolution of polydonty); Fowler 1980 (Special topic; ecosystem modules); Fraker 1978 (Special topic; monitoring program, MacKenzie Estuary, N.W.T.); Fraser & Huggett 1973 (Reproduction; nutrition; specific growth rates); Friend & Crampton 1961 (Product; liver causes vitamin A toxicity in mink); Frost & Lowry 1981 (Food; special topic; food & trophic relationship in Bering Sea); Frost et al. 1979 (Toxic compounds; feeding patterns & trophic relationships of offshore petroleum development); Fujii et al. 1954b (Lipid; product; nutritive value of hydrogenated oil), 1956 (Lipid; product; nutritive value of glycerides & methyl esters of fatty acids); Fujii & Okura 1956b (Lipid; product; nutritive value of essential fatty acids); Furuhashi 1927 (Mineral; Cl, total P and S in urine); Garton et al. 1952 (Product; oil on composition of depot lipids of pigs); Gaskin 1972 (Special topic; book), 1978 (Carbohydrate & energetics; form & function of digestive tract, metabolic rate and specific energy budget), 1982 (Special topic; ecology; book); Geraci 1978 (Care; special topic; zoo & wild animal medicine; general; book), 1981a (Care; nutrition; dietary disorders); Geraci & Gerstmann 1966 (Protein; relationship of dietary histamine to gastric ulcers in dolphins); Geraci & St. Aubin 1979a (Special topic; stress & disease in marine environment), 1979b (Special topic; stranding workshop), 1979c (Special topic; insights through strandings); Geraci & Sweeney 1978 (Care; clinical techniques); Gill & Tucker 1930 (Lipid; composition of porpoise jaw oil); Godfrey 1977 (Product; toxic compounds; accumulation of Hg in pigs fed meal & solubles); Golding & Morris 1926 (Product; proximate composition; meal fed to pigs); Golovin 1962 (Lipid; product; refractometric determination of lipid content in meal); Goodale et al. 1981 (Toxic compounds; responses to Regal Sword oil spill); Goss et al. 1982 (Myoglobin); Gray et al. 1951 (Product; essential amino acids, minerals (Cu; P), vitamins (riboflavin; nicotinic acid; pantothenic acid; pyridoxine) & water-soluble solids); Gray 1927 (Diving; special topic; depth of dives), 1928 (Special topic; blubber); Green & Singleton 1954 (Product; vitamin; liver vitamin A); Gridgeman et al. 1948 (Vitamin; vitamin A in liver); Geiler 1978 (Special topic; strandings); Gupta 1967 (Lipid; coprostanol in oil); Guttmann 1955 (Mineral; product; lipid-extracts of enzymic hydrolyzates of liver); Hall 1981 (Special topic; aspects of natural history; Prince William Sound, Alaska); Halnan 1942 (Product; meat in chick diet); Halse 1953 (Vitamin; vitamin A potency in liver oil); Harrison & Tomlinson 1956 (Special topic; venous system observations); Hartzell et al. 1968b (Myoglobin; hemic dissociation in hemoglobins & their alkylated derivatives); Hashimoto & Ludowieg 1968 (Carbohydrate & energetics; protein; protein polysaccharide from the nucleus pulposus of intervertebral disks); Hashimoto et al. 1963 (Carbohydrate & energetics; anticoagulant isolated from lung & intestines), 1967 (Carbohydrate & energetics; heparin); Hay & Sergeant 1976 (Special topic; technical report on Arctic Islands pipelines); Heggenhaugen 1932 (Product; food; for fur-bearing animals); Hewitt 1954 (Product; proximate composition; solubles in pig feeds), 1957 (Product; meal in pig feed); Hilditch & Maddison 1948 (Lipid; component fatty acids & glycerides); Hinga 1979 (Carbohydrate & energetics; food; food requirements; basal metabolism); Hippe et al. 1977 (Vitamin; protein; cobalmin-binding proteins in stomach mucosa and serum of porpoise spp.); Hiramatsu et al. 1970 (Endocrinology; antagonizing substances from whale heart to vasopressin-induced myocardial hypoxia); Hissa 1980 (Thermoregulation; responses to cold); Hjarde 1950 (Vitamin A); Hofman 1975 (Bibliography); Hope et al. 1954 (Product; meat & solubles in pig feeds); Holtzmann 1969 (Toxic compounds; concentrations of naturally occurring radionuclides Ra-226, Pb-210 & Po-210 in aquatic fauna); Horvath et al. 1968 (Evolution & taxonomy; haematology; respiratory & electrophoretic characterization of hemoglobins of 4 spp. of porpoise & a sea lion); Hotta et al. 1969 (Food; stomach contents of dolphins & porpoises; Kyushu, Japan); Hyland et al. 1977 (Toxic compounds; petroleum hydrocarbons; effects on ecosystem); Inoue & Miyawaki 1973 (Carbohydrate & energetics; intestinal heparin); International Council for the Exploration of the Sea (I.C.E.S.) 1974 (Bibliography), 1978 (Bibliography), 1979 (Bibliography); Irvine 1970 (Special topic; small cetacean transportation); Irvine et al. 1982 (Special topic; tagging techniques of small cetaceans); Ishikawa 1958 (Lipid; nitrogen absorption by oil), 1959 (Lipid; oxygen absorption by oil); Ito & Fukuzumi 1962 (Lipid; quantitative analysis of fatty acids by GLC); Iwasa & Mukai 1950 (Lipid; pigment in oil); Johansen et al. 1980 (Toxic compounds; heavy metals & organochlorines in Greenland); Junquerira et al. 1968 (Haematology; dolphin; biochemistry of blood serum); Junquerira et al. 1973 (Enzyme; parotid & submandular glands; digestive enzymes); Kabaivanski 1955 (Lipid; product; vitamin; vitamins A & D_3 in fat; iodine No. & saponification No. of fat in dolphins); Kabayashi et al. 1970 (Endocrinology; gastrone extraction from gastric mucosa); Kanwisher & Sundnes 1966a (Thermoregulation), 1966b (Special topic; physiology of small spp.); Kasai 1982 (Protein; isolation & characterization of antigenic fragments of proteoglucans core protein); Kawamura 1971 (Food; special topic; stomach contents after chasing of baleen & sperm whale), 1980b (Food; bibliography; review of food of balaenopterids); Kendrew et al. 1954 (Evolution & taxonomy; myoglobin; spp. specificity of myoglobins); Kieckebusch et al. 1960 (Product; protein; meal amino acid composition; biological value); Kimura 1974 (Carbohydrate & energetics; spp. specificities of heparins); Kirsch & Jantzen 1941 (Product; meal); Kishore & Guinn 1972 (Toxic compounds; baseline studies; Hg, Se & Zn in dolphins); Kizvetter 1953 (Lipid; oil); Klem 1935 (Lipid; biochemistry of oil); Kobayashi & Kabeno 1969 (Protein; antiulcerous mucoproteins from digestive system); Kondo &

Narita 1959 (Product; nutrients in brains); Korzhuev & Glazova 1967a (Haematology; myoglobin; quantitative characterization blood; hematopoietic tissue; Black Sea dolphins), 1971 (Haematology; special topic; hemoglobin synthesis; biochemical aspect of adaptation); Korzhuev et al. 1979 (Haematology; special topic; bibliography; characteristics of blood; review; Black Sea dolphins), 1973 (Special topic; biochemical aspects of adaptation); Kosakai & Yosizawa 1982 (Carbohydrate & energetics; heparin); Krutchenskii 1968 (Vitamin; use of NaCl for extracting vitamin A from liver), 1973 (Product; protein; protein & vitamin concentrates), 1978 (Vitamin; vitamin A; dry protein-vitamin preparations); Krutchenskii et al. 1977 (Vitamin; use of antioxidants to prevent vitamin A decomposition); Krylov & Medvedev 1971 (Food; observation during 13th Soviet Antarctic expedition); Kuwada & Kaneyuki 1952 (Lipid; malodorous constituents of hardened oil); Landy 1980 (Special topic; bibliography; review on neoplasia); Lasson et al. 1951 (Product; protein; condensed-solubles for poultry feed; amino acid composition); Laws 1977 (Food; Euphausia superba); recent uses & potential of radio telemetry in field studies); Leatherwood & Evans et al. 1976 (Special topic; N.W. Atlantic); Lee 1974 (Lipid; food; lipid composition of copepod (Calanus hyperboreus) from Arctic Ocean; seasonal changes and depth); Lehman & Peterle 1969 (Toxic compounds; DDT); Lesch 1969 (Lipid; development of neutral lipids in brain of man, whales & dolphins); Liberti et al. 1958 (Lipid; fatty acid determination in fats; automatic electrometric titration); Litchfield 1973 (Lipid; evolution & taxonomy; taxonomic patterns in the triglyceride structure of fats); Litchfield et al. 1975 (Biological sonar; lipid; comparative lipid patterns in acoustical and non-acoustical fatty tissues); Lock & Solly 1976 (Toxic compounds; DDT in dolphin livers); Lockwood 1976 (Toxic compounds; effect of pollutants); Lockyer 1976 (Special topic; body weights of large whales), 1976a (Food; nutrition; baleen whales; growth & energy budgets, S. hemisphere), 1981 (Nutrition; growth & energy budgets of baleen whales; S. hemisphere); Lovern 1949 (Lipid; fatty acids in porpoises & dolphins); Lowell & Flanigan 1980 (Special topic; chemoreception); Lynch et al. 1970 (Product; nutritional evaluation of meat & bone meal proteins in rats); Lyubeznov & Popova 1971 (Lipid; physiochemical & antibacterial properties of different fat fractions); Mackintosh 1973 (Food; stomach contents; krill), 1974 (Food; stomach contents; krill); MacNeil 1975 (Haematology; blood values of some captive); Majima 1963 (Lipid; product; effect of polyunsaturated fatty acids on experimental hypercholesteremia of rats); Maksimov 1967 (Vitamin; liver vitamin A); Malins 1977 (Toxic compounds; oil fouling; Arctic & subarctic); Malmbros & Wigand 1957 (Lipid; product; effect on serum cholesterol of diets containing different fats); Malvin & Rayner 1968 (Haematology; mineral; renal function & blood chemistry); Malvin & Vander 1967 (Endocrinology; plasma renin activity of 5 spp.); Mansfield 1980 (Toxic compounds; impact of oil production); Manski et al. 1964 (Evolution & taxonomy; protein; immunochemical analysis of the phylogeny of lens proteins); Manton 1976 (Care; nutrition of dolphins); Marnov & Kolosova 1966 (Product; amino acid composition of meal); Maruyama 1965a (Product; products as food), 1965b (Lipid; oil); Matsuno & Hashimoto 1964 (Carbohydrate & energetics; ω-heparin isolated from whale & intestine & its toxicity); Matsuura et al. 1952 (Product; protein; total N & methionine of liver & blood powder); Matthews 1958 (Special topic; biology); Mayfield et al. 1955 (Product; vitamin; dietary dried solubles on riboflavin & thiamine content of chicken eggs); McAlister 1981 (Carbohydrates & energetics; heat loss & energy consumption); McCormick 1969 (Anaesthesia; sleep, respiration & anaesthesia relationships of porpoise); McDonald 1953 (Product; condensed-solubles in chicken feed); McDonald & McClymont 1954 (Product; condensed solubles in chicken feed; nutritional value); McLendon 1977 (Carbohydrate & energetics; myoglobins; correlation between hemoglobin thermodynamics stabilities & species metabolic rates); Medway 1983 (Special topic; evaluation of safety & usefulness of biopsy techniques, free-swimmers); Medway et al. 1966 (Special topic; clinical jaundice in dolphins); Mercer 1973 (Special topic; distribution & intraspecific variation in pigmentation of Odontoceti; N.W. Atlantic); Merino 1953 (Mineral; lipid; proximate composition; product; composition & food value of meat), 1954 (Mineral; product; proximate composition; nutritive value of meat); Mermoz (Special topic; preliminary report; S.W. Atlantic); Meshcherskii et al. 1978 (Anaesthesia; drugs; anaesthesization of porpoises without blocking respiratory activity); Miller & Carpenter 1964 (Product; protein; amino acid composition of meat in relation to N & S balance of rats); Miller et al. 1965 (Protein; product; availability of methionine in meal); Miller & Ridgway 1963 (Care; clinical experience); Milne 1955 (Product; condensed-solubles in chick feed); Mitchell 1972 (Food; special topic; feeding behaviour & pigmentation), 1973 (Special topic; world status); Mizue 1951 (Food; adjacent waters of Japan); Momoshima et al. 1981 (Toxic compounds; Ra-226, K-40, Cs-137, Co-60, Co & Rb in muscle & lung; radioisotopes in dolphins); Morii 1974a (Lipid; fatty acid composition of various lipids from dolphins); Morton & Stubbs 1946 (Vitamin, vitamin A in liver oil); Motavkina et al. 1977 (Haematology; isolation of complement from blood); Mouginn & Prevost 1980 (Food; interaction with other animals for food supply); Mukai 1950 (Lipid; pigment extraction from oil), 1954 (Lipid; fractionation of pigment); Nachtigal 1980 (Biological sonar; Odontoceti echolocation performance on object size, shape & material); Nagasawa 1968 (Carbohydrate & energetics; heparin; high anticoagulant activity); Nakagawa 1971a (Lipid; protein; sialic acid content in cartilage protein polysaccharides), 1971b (Protein; protein polysaccharide); Nakagawa et al. 1964 (Protein; sialic acid in nasal cartilage); Nakai 1959 (Protein; amino acid composition of proteins of various body parts); Nakashima & Tanaka 1966a (Protein; chondroitin sulfate production from nasal cartilage), 1966b (Product; protein; manufacture chondroitin sulfate from nasal cartilage); Nasedkina & Karasnitskaya 1972 (Protein; creatine & creatinine in muscle); Neave & Wright 1968 (Special topic seasonal migration; Bay of Fundy); Neira et al. 1982 (Special topic; guide to identity at sea); Nemoto & Kasuga 1965 (Food; crustaceans; food of baleen & right whales; Gulf of Alaska of N. Pacific); Nevenzel 1970 (Lipid; occurrence, function & biosynthesis

of wax esters; 30 spp.; review); Nicol 1967 (Special topic; biology); Nikolaeva & Perepletchik 1962 (Vitamin; vitamin A content in liver); Nonaka 1952 (Vitamin; vitamins B_1 and B_2 in meat); Nishikawa et al. 1966 (Special topic; dolphin; marking); Norris 1964 (Biological sonar; sonar problems of echolocation), 1968 (Biological sonar; taxonomy & evolution; evolution of acoustic mechanisms); Norris & Dohl 1971 (Lipid; biological sonar; head oil (isovaleric acid) chemistry; observations of schooling behaviour); Norris & Harvey 1973 (Biological sonar; sound transmission in porpoise head); Norris & Pryor 1970 (Special topic; tagging method of small cetaceans); Notevarp & Fyrst 1967 (Lipid; fatty acid composition of oil & blubber fat); Novikova 1952 (Vitamin; vitamin B_1 and B_2 content in liver of dolphins; Antarctic; Black Sea); Ogata 1951/52 (Product; protein; methionine content); Ogawa et al. 1958 (Product; protein; amino acid composition of meat); Okada et al. 1953 (Protein; product; glutathione determination by polarography); Oki & Ueno 1959 (Protein; vitamin; vitamin A, B_2 and B_{12}, nicotinic acid & protein content of liver); Okura et al. 1952b (Lipid; properties of oil, water content, acid No., saponification No. & iodine No.; Antarctic); Olsson 1980 (Taxonomy & evolution; content of C-14; N. Europe), 1983 (Special topic; porpoise; environmental specimen bank; Swedish Museum of Natural History); Omote 1959 (Lipid; molecular distillation residue of liver oil; absorption spectrum); Omura & Sakiura 1956 (Special topic; study on coast of Japan); Oritsland 1977 (Carbohydrate & energetics; Arctic mammals; model of energy balance); Oritsland & Ronald 1979a (Thermoregulation; solar heating); O'Shea et al. 1980 (Toxic compounds; DDE, p,p'-DDT, p,p'-DDE & PCB in blubber); Osipova 1976a (Endocrinology; enzymes; phosphomonoesterases of steroid producing cells); Ototani et al. 1981 (Carbohydrate & energetics; inactive forms of heparin); Owen & Hochachka 1974 (Carbohydrate & energetics; diving; enzyme; protein; purification & properties of dolphin muscle aspartate & alanine transaminases & their possible role in energy metabolism in diving); Parry 1949 (Special topic; lipid; blubber structure); Patten & Saruba 1979 (Special topic; strandings; Los Angeles & Orange Counties); Percy 1977 (Toxic compounds; effects of oil); Perepletchik 1951 (Vitamin; vitamin A in liver & other internal organs of porpoise); Perrin & Myrick 1979 (Special topic; workshop on age determination of Odontoceti); Peters & Wieske 1966 (Lipid; traces of polyunsaturated fatty acids); Pihl 1952 (Lipid; product; cholesterol content of food); Pitcher & Calkins 1975 (Toxic compounds; distribution in relation to petrochemical development; Prince William Sound & Gulf of Alaska); Pocchiari et al. 1962 (Product; protein; dipeptide β-alanyl-3-methylhistidine (balenine) in meat extract); Portmann 1975 (Toxic compounds; bioaccumulation & effects of organochlorine pesticides); Poulter 1969 (Biological sonar; conditioning animals for echolocation abilities); Prelog & Meister 1949 (Endocrinology; isolation of progesterone from corpus luteum); Pritchard & Cawthorne 1955 (Product; vitamin; composition of meal; albumin, riboflavin, niacin, pantothenic acid, pyroxidine, inositol and vitamin B_{12}); Pritchard & Smith 1960 (Product; protein; composition & amino acid content of meat); Pritchard & Wraige 1952 (Product; vitamin; vitamin B complex in meat and liver meals; livestock feed); Proskuryakov 1972 (Enzyme; protein; chymotrypsinogen content in pancreas); Prothero 1980 (Haematology; scaling of blood parameters); Purdie 1885 (Milk & lactation; chemical composition; porpoise); Radola 1968 (Myoglobin; protein; serum albumins); Ramaekers et al. 1979 (Protein; β-crystallins); Reish 1976 (Toxic compounds; marine pollution); Rice 1974 (Special topic; whales & whale research in N.E. Pacific), 1977a (Taxonomy evolution; world list); Rideout et al. 1976 (Special topic; lipids; synthesis of substituted naphthoquinones related to prinoid pigments); Ridgway & Flanigan 1981 (Special topic; humane method of killing); Ridgway & Green 1967 (Reproduction; male porpoise sexual rhythm); Ridgway & Howard 1979 (Haematology; diving; special topic; lung collapse & intramuscular circulation during free dive; evidence for nitrogen washout in dolphin); Ridgway & Johnston 1966 (Haematology; special topic; blood oxygen & ecology of 3 genera); Ridgway & McCormick 1967a (Anaesthesia; major surgery of porpoises), 1967b (Anaesthesia; surgery for porpoises), 1971 (Anaesthesia; porpoise); Ridgway et al. 1970 (Haematology; hematologic findings in small spp.); Rieu & Gautheron 1968 (Anaesthesia; small delphinids; method of introduction of tube for anaesthesia); Roberts et al. 1964 (Nutrition; special topic; atherosclerosis), 1965 (Special topic; nutrition; spontaneous atherosclerosis in toothed & baleen whales), 1963 (Nutrition; special topic; arteriosclerosis); Robin et al. 1980 (Carbohydrates & energetics; depressed energy & oxygen requirements); Rochon-Duvegneault 1940 (Lipid; oil); Rudolph 1949 (Product; utilization of raw materials of the sea); Rzhavskaya & Makarova 1974 (Lipid; fatty acid composition); Saayman et al. 1972 (Special topic; observation on inshore & pelagic dolphins; S.E. Cape coast of South Africa); Sabashnikova et al. 1972 (Endocrinology; insulin from adrenal glands); Saito & Ishihara 1956a (Enzyme; protein; isolation & purification of stomach pepsin), 1956b (Enzyme; protein; pepsin properties); Saito et al. 1957a (Protein; enzyme; amino acids of pepsin), 1957b (Protein; enzyme; crystalline pepsin; free amino acid in peptic digests of various proteins); 1976 (Haematology; Fitzgerald factor of high molecular weight kininogen clotting activity in human plasma in health & disease in various mammal plasma); Sano 1967c (Lipid; 2,6,10,14-tetramethylpentadecanoic acid in oil); Sasano & Higashi 1958 (Endocrinology, assay method for insulin in pancreatic extracts); Sato et al. 1967 (Lipid; GLC of triglycerides in oil); Schenkkan & Purves 1973 (Special topic; anatomy of nasal tract & function of spermaceti organ of Odontoceti & Physeteridae); Schmidly & Melcher 1974 (Bibliography; annotated check list; key, Texas spp.); Schneppenheim 1980 (Mineral; fluoride concentration in Antarctic); Scholander & Schevill 1955 (Thermoregulation; counter current heat exchange in fins); Schultz 1938 (Special topic; can the weight be calculated?); Schulze 1950 (Product; protein; proximate composition; amino acid composition; meal); Sergeant 1961 (Special topic; E. Canada, dolphins), 1966 (Special topic; population in N.W. Atlantic), 1978 (Special topic; ecological isolation), 1980 (Toxic compounds; Hg & organochlorine residues of tissues; St. Lawrence estuary); Sergeant & Fisher 1957 (Special topic; small Cetacea; E. Canadian waters); Sergeant et al. 1970 (Special

topic; inshore records of E. Canada); Sergeev 1962 (Product; vitamin; enrichment of oil with vitamin D); Severinghaus 1979 (Bibliography); Severinghaus & Nerini 1977 (Bibliography); Sharp 1975 (Haematology; electrophoretic & oxygen-dissociated properties of hemoglobins of delphinids); Shirai et al. 1977 (Enzyme; isozymes of creatine kinase in porpoise heart & brain); Sidwell 1981 (Lipid; mineral; product; vitamin; chemistry & nutritional composition); Sigel 1972 (Special topic; virological studies of dolphins); Sinitsyna et al. 1972 (Endocrinology; isolation of growth hormone & prolactin from hypophysis & their characteristics); Skinder 1979 (Nutrition; captivity); Skinder & Mead 1979 (Special topic; strandings, problems & solutions); Sleptsov 1961b (Food; distribution of feeding areas & whales in Okhotsk Sea); Slijper 1954 (Special topic; importance of measuring thickness of layers of blubber), 1956 (Reproduction; gestation & birth), 1958 (Special topic; organ weights & symmetry problems of porpoises), 1962 (Special topic; book); Smith et al. 1979a (Haematology; red blood cell deformity); Soldatovic & Petrovic 1970 (Toxic compounds; toxic poisoning with Tl, As & Hg & use of dithiocarbamate as antidote for porpoise); Sorimachi & Ui 1974 (Endocrinology; iodoamino acid distribution on thyroglobins of various spp.); Stolk 1952 (Special topic; tumor), 1953a (Special topic; tumor), 1953c (Special topic; tumor); 1954a (Special topic; inflammation), 1962 (Special topic; tumor); Storey & Hochachka 1974 (Carbohydrate & energetics; enzymes; diving; glycolytic enzyme in muscle; role of pyruvate kinase in aerobic & anaerobic transitions during diving); Stoyanov 1971 (Special topic; immunization of porpoise); Stroud & Roffe 1979 (Special topic; causes of death; Washington & Oregon); Stroud et al. 1979 (Special topic; mortality studies St. George I.); Suyama & Maruyama 1969a (Protein; balenine in dolphin muscle); Sweeney & Ridgway 1975 (Care; procedure for clinical management of small spp.), 1975a (Special topic; common diseases); Tachibana et al. 1972 (Endocrinology; toxic glycopeptide from stomach mucosa); Takaoka 1944 (Enzyme; protein; protease); Takaoka et al. 1946 (Lipid; vitamin; vitamin A content of liver; saponification No.; unsaponifiable matter; iodine No.; acid No.); Takemura 1927b (Mineral; protein; total N, Na, K & Ca of synovial fluid); Tamura & Ui 1970 (Endocrinology; origin of multiple components of thyroid-stimulating hormone), 1972a (Endocrinology; 4 active thyroid-stimulating components from pituitary gland), 1972b (Endocrinology; isolation of thyroid-stimulating component with luteinizing hormone activity); Tamura-Takahashi & Ui 1977 (Endocrinology; purification & properties of 4 biologically-active components of luteinizing hormone); Tanaka & Hata 1950 (Product; meat freezing using different heat conductivity on its surface); Tanaka 1982 (Food; krill; sighting survey); Tarr et al. 1950 (Vitamin; vitamin B_{12} content); Taruska et al. 1975 (Toxic compounds; DDT, PCB, chlordane & dieldrin in blubber of 18 cetaceans); Taverner 1975 (Toxic compounds; product; protein; meal & solubles in pig feed; Hg accumulation in pig tissues); Tavolga 1983 (Biological sonar; theoretical principles for study of communication); Tawara & Fukazawa 1950a (Vitamin; vitamin A content of liver), 1950b (Vitamin; vitamin A content in liver), 1950c (Vitamin; factors in vitamin A decomposition in oil); Telfer et al. 1970 (Water; do dolphins drink water?); Terao et al. 1970 (Nucleic acid; pancreatic ribonuclease); Thompson 1978 (Special topic; California marine mammals center); Thompson & Kon 1950 (Vitamin; vitamin A content in liver); Tinoco 1982 (Lipid); Tinyakov et al. 1973 (Molting; patterns of skin microstructure); Titova 1958 (Product; digestibility of meat by foxes); Toda & Seno 1970 (Protein; sialic acid in keratin sulfate fraction from cartilage); Todd 1963 (Product; meal fed to pigs; Queensland); Tomilin 1946 (Nutrition; milk & lactation), 1957 (Special topic; Cetacea of U.S.S.R.), 1977 (Thermoregulation; peri-, semi- & aquatic mammals); Tomilin et al. 1982 (Special topic; tagging of small spp.; non-traumatic method); Toyomizu et al. 1963 (Lipid; product; oil on fatty acid composition of rainbow trout); Tranter 1977a (Food; planktonic ecosystems studies of E. Indian Ocean; Copepoda), 1977b (Food; planktonic ecosystem studies of E. Indian Ocean; Amphipoda); Tranter & Kerr 1977 (Food; numerical abundance & biomass of plankton; E. Indian Ocean); Troitskaya 1968 (Myoglobin; proteolytic enzyme hydrolyses of myoglobin; peptide maps); Turner & Norris 1966 (Biological sonar; discriminative echolocation; porpoise); Tyutyunnikov & Grechishnikova 1965 (Lipid; low molecular weight fatty acids in fat); U.S. Marine Mammal Commission 1979 (Bibliography); Van Genderen et al. 1950 (Vitamin; vitamin A); Vernberg 1976 (Toxic compounds; effects of pollution); Ver Ploeg et al. 1971 (Myoglobin; mechanism & catalysis for addition of cyanide to myoglobins); Viale 1981 (Special topic; lung pathology in stranded; Mediterranean sea); Vincenti & Chabert 1978 (Toxic compounds; Pb, PCB, DDT, DDE & DDD in dolphin blubber); Voogt & De Vries 1966 (Protein; balenine); Wagemann & Muir 1984 (Toxic compounds; heavy metals & organochlorines; overview & evaluation); Wahnon 1956 (Lipid; product; head oil triglycerides; uses); Waldern 1963 (Product; solubles in beef calf feed); Wartzok et al. 1980 (Special topic; radio tag); Watanabe & Suzuki 1950b (Product; proximate composition; various parts); Waterworth 1964 (Product; nutritive quality & available amino acid composition of protein concentrates); Watson 1981 (Special topic; bibliography; sea guide to world's whales); Wedmid 1975 (Biological sonar; NMR spectroscopy of isovaleryl triglycerides using lanthanide shift reagents); Watkins 1975 (Food; right whale feeding & baleen rattle); Watkins et al. 1980 (Special topic; radio tag); White 1953 (Milk & lactation; composition of milk); Wilhem & Tastaldi 1964 (Vitamin; tocopherols); Williams & Natoli 1972 (Product; solubles in pig feed); Winters & Carscadden 1978 (Food; review of capelin ecology & estimation of surplus yield from predator dynamics); Wollenberger et al. 1958 (Mineral; protein; orthophosphate & phosphocreatine content of heart); Wood 1978 (Bibliography), 1980 (Bibliography); Woodman & Evans 1948 (Product; composition & nutritive value of meat meal fed to pigs); Woodhouse et al. 1979 (Special topic; strandings; Santa Barbara channel region); Wynston et al. 1960 (Endocrinology; thyrotropin); Yamagawa & Nakamura 1926 (Edocrinology; chemical study of pancreatic insulin); Yasugi et al. 1983 (Lipid; brain cerebrosides; 2-O-acylgalatose ceramide); Yazawa 1933 (Protein; nucleic acid; hypoxanthine, histidine & lysine); Yone & Tomiyama 1953 (Nutrition; product; extraction of

antianemic factors); Yozhizawa 1964 (Carbohydrate & energetics; ω-heparin isolated from organs); Zenkovitch 1938 (Milk & lactation; milk of large spp.), 1970 (Food; Antarctic plankton); Zitko 1975 (Toxic compounds; aromatic hydrocarbons); Zubchenko 1977 (Special topic; biosorption).

Mystoceti; Balaenidae

Balaena australia

Townsend 1935 (Special topic; distribution; logbooks of American whaleships).

Balaena glacialis

Toyama & Takai 1954 (Lipid; physicochemical properties of oil).

Balaena mysticetus Linnaeus, 1758 (bowhead whale; Great Polar whale; Arctic or Greenland right whale)

Arnason 1982 (Nucleic acid; DNA); Arnason et al. 1982 (Nucleic acid; DNA); Beaubier et al. 1970 (Food; N.W.T.); Braham & Krogman 1977 (Special topic; population biology; Bering, Chukchi & Beaufort seas); Braham et al. 1977 (Food; Bering, Chukchi & Beaufort seas); Brown 1868 (Food; Davis Str. & Baffin I.); Brueggeman 1982 (Food; early spring distribution; Bering Sea); Christiansen 1981 (Food; polar bear foraged on dead whale); Finley et al. 1974 (Food; number & distribution; central Canadian Arctic); Finley & Johnson 1977 (Special topic; distribution; vicinity of Somerset I. - Bellot Str. on Aug.-Sept. 1976); Fraker 1979a (Special topic; spring migration; Beaufort Sea); Fraker et al. 1978 (Special topic; S. Beaufort Sea); Frost & Lowry 1981 (Food; feeding & trophic relationship; Bering Sea); Henry et al. 1983 (Special topic; gross anatomy of respiratory system); Herwig et al 1983 (Lipid; stomach microbial formation of volatile fatty acids); Johnson et al. 1966 (Food); Lowry et al. 1978 (Food; Point Barrow, Alaska); Mansfield 1971 (Special topic; occurrence in Canadian Arctic); Marquette 1977 (Food; catch by Alaskan Eskimos); Mitchell 1975 (Food; trophic relationship & competition for food; N.W. Atlantic); Nemoto 1970 (Food; feeding patterns); Reeves 1980 (Special topic; Spitzbergen stock; short review); Ross 1974 (Special topic; distribution, migration & depletion in Hudson Bay 1860-1915); Scammon 1874 (Food; N.W. coast of N. America; account of American whale fishery); Scoresby 1820 (Special topic; account of Arctic regions with history & description of northern whale fishery); Sergeant & Hoek 1975 (Food; special topic; seasonal distribution, E. Beaufort Sea); Tillman 1980 (Special topic; scientific perspective); Townsend 1935 (Special topic; distribution; log of American whaleships).

Balaena sieboldii (northern right whale)

Townsend 1935 (Special topic; distribution logbooks of American whaleships).

Eubalaena glacialis Borowski, 1781 (black right whale; right whale)

Tsuyuki & Itoh 1970 (Lipid; fatty acid composition of blubber, liver, stomach & tongue); Tsuyuki et al. 1964 (Lipid; fatty acid composition of liver oil); Tsuyuki & Naruse 1963 (Lipid; fatty acid composition of oil), 1964 (Lipid; fatty acid composition of brain neutral lipids & phospholipids); Watkins 1975 (Food; feeding); Watkins & Schevill 1979 (Food; feeding behaviour), 1982 (Food; feeding; Cape Cod, Massachusetts, U.S.A.).

Balaena sp.

Mermoz 1980 (Special topic; preliminary report; S.W. Atlantic).

Mystoceti; Balaenopteridae

(Balaenoptera acutorostrata Lacépède, 1804 (minke whale; lesser rorqual; little piked whale; little finner whale).

Arnason 1982 (Nucleic acid; DNA); Arnason et al. 1976 (Nucleic acid; liver; DNA), 1977 (Nucleic acid; DNA); 1978 (Nucleic acid; DNA), 1982 (Nucleic acid; DNA); Best 1982 (Special topic; food; reproduction; seasonal abundance, feeding, reproduction, age & growth; Durban, Antarctic); Betesheva 1961 (Food; Kurile region), 1962 (Food; Kurile area; stomach content); Borisov 1981a (Haematology; myoglobin; protein; electrophoresis of hemoglobin & myoglobin), 1981b (Enzyme; haematology; protein; electrophoresis of lactate dehydrogenase isozymes of blood plasma, corpus luteum, corpus albicans & testes), 1981c (Protein; evolution & taxonomy; electrophoresis of proteins; haptoglobins); Braekkan 1948 (Vitamin; vitamin A & D, riboflavin & thiamine in liver, blubber areas and tongue); Bricteux-Gregoire et al. 1975 (Enzyme; nucleic acid; isolation of pancreatic ribonuclease, trypsinogen and 2 chymotrypsinogens); Henry and Best 1983 (Toxic compounds; DDT, dieldrin & PCB in blubber); Ishihara 1960 (Enzyme; protein; crystalline stomach pepsin), 1961 (Enzyme; lipid; pancreatic lipase); Kendrew et al. 1954 (Evolution & taxonomy; myoglobin; spp. specificity of myoglobins); Kusakabe et al. 1962 (Protein; content of anserine, carnosine, creatine & amino acids); Lehman 1980 (Myoglobin; structure); Partman & Schlaszus 1973 (Protein; free amino acids, anserine & carnosine of muscle); Pederson 1950 (Lipid; content of saturated fatty acids in blubber); Saito & Yokoyama 1954 (Endocrinology; insulin extraction); Sergeant 1963a (Special topic; N.W. Atlantic), 1982 (Special topic; mass stranding); Ueno & Mitsushima 1958 (Lipid; composition of oil); Undrum et al. 1982 (Protein; meat ophidine (β-alanyl-3-methylhistidine) in human urine); Xu et al. 1983 (Special topic; food; reproduction; eat Ammodytes personatus & Euphausia pacifica; body length & embryo length).

Balaenoptera borealis Lesson 1828 (sei whale; northern rorqual; pollack whale; sardine whale; Japan finner whale; Rudolphi's rorqual)

Ackman et al. 1975c (Lipid; blubber fat deposition in Mystoceti), 1975b (Lipid; layering &

& tissue composition of blubber; N.W. Atlantic); Arnason et al. 1977 (Nucleic acid; DNA), 1978 (Nucleic acid; DNA), 1982 (Taxonomy & evolution, nucleic acid; DNA); Betesheva 1961 (Food; Kurile region), 1962 (Food; stomach content; Kurile area); Borisov 1981a (Haematology; protein; taxonomy & evolution; myoglobin; electrophoresis of hemoglobin & myoglobins), 1981b (Enzyme; haematology; taxonomy & evolution; protein; electrophoresis of lactate dehydrogenase; isozymes in blood plasma, corpus luteum, corpus albicans & testes), 1981c (Protein; evolution & taxonomy; electrophoresis of proteins; haptoglobins); Bottino 1978 (Lipid; lipids of blubber, liver, muscle and stomach contents (Parathemisto gaudichaudii); triglycerides and phospholipids; positional distribution of fatty acids); Brockerhoff et al. 1968 (Lipid; positional distribution of fatty acids in depot triglycerides); Brown & Mayhall 1977 (Enzyme; protein; urea formation in liver; urea cycle; ornithine carbamyl transferase activity); Bulatov et al. 1983 (Endocrinology; neurotropic effect of pituitary somatotropin & its fragments); Elizarova et al. 1982 (Endocrinology; isolation & partial characterization of amino-acid sequence of prolactin); Gamble 1968 (Reproduction; seasonal cycle & reproduction in the S. hemisphere); Gill & Hughes 1971 (Food; Pacific saury, Cololabis saira); Gray et al. 1951b (Product; mineral; vitamin; composition of liver extract); Hashimoto & Mamuro 1967 (Lipid; hydrocarbons; pristane & squalene in unsaponifiable matter of blubber oil); Hasnain 1978 (Protein; tryptic susceptibility of actinomyosin); Henry & Best 1983 (Toxic compounds; DDT, dieldrin & PCB in blubber); Igarashi et al. 1956a (Lipid; heart phospholipids (PC; PE) and neutral lipids (unsaponifiable matter, cholesterol & fatty acids)), 1956b (Lipid; heart phosphatidic acid; iodine No. & fatty acids); Ishihara 1960 (Enzyme; protein; crystalline stomach pepsin); Ishihara et al. 1958 (Endocrinology; insulin structure; amino acid analysis); Ito et al. 1952 (Endocrinology; pituitary adrenocorticotropic activity); Jonsgard & Darling 1977 (Special topic; biology in E. Atlantic); Kawamura 1970 (Food; stomach contents; Japanese Antarctic expedition), 1974 (Food; eat 23 spp. of crustaceans; feeding ecology), 1982 (Food; stomach content; food habits; N. Pacific Ocean & prey distribution; zooplankton Calanus, Euphausia, Thysanoessa, Nematoscelis, Sergestes, Vinciguerria, Scomber, Cololabis, & Pseudopentaceros); Kawamura et al. 1976 (Protein; composition of baleen; amino acid composition; water & ash); Kawauchi et al. 1978 (Endocrinology; isolation & primary structure of adrenocorticotropin from pituitary); Kendrew et al. 1954 (Evolution & taxonomy; myoglobin; spp. specificity of myoglobins); Kimura et al. 1981 (Protein; electrophoresis of connectin from muscle); Komori & Morita 1951 (Lipid; brain sterols & unsaponifiable matter); Kusakabe et al. 1962 (Protein; content of anserine, carnosine, creatine & amino acids); Litchfield 1968 (Lipid; predicting positional distribution of 22:5ω6 & 22:6ω3 fatty acids in triglycerides); Lockyer 1977 (Nutrition; special topic; estimates of growth), 1978 (Nutrition; reproduction; theoretical approach to growth and energy balance, to female reproduction), Mednikov & Shubina 1976 (Nucleic acid; taxonomy & evolution; DNA); Mrochkov & Baidalinova 1974 (Protein; lipid; nucleic acid; mineral; proximate composition; lipid content & amino acid composition of meat; Co, Mn, Sn, anserine, carnosine & purines); Nemoto & Kawamura 1977 (Food; food habits & distribution; N. Pacific); Nemoto & Yoo 1970 (Food; eat Parathemisto gaudichaudii; Antarctic); Okura & Mori 1957 (Lipid; quality & properties of oil); Oseki 1934 (Product; vitamin; nutritive value & vitamins A & E content of liver); Osipova et al. 1978 (Endocrinology; pituitary somatotropin; structure studies); Pankov 1982 (Enzyme; endocrinology; role of proteolytic enzymes in biological activity of pituitary somatotropic hormones); Pankov et al. 1982 (Endocrinology; pituitary somatrotropin), 1976a (Endocrinology; structural characteristics of pituitary somatotropin), 1977 (Endocrinolgoy; amino acid sequence of corticotropins), 1978 (Endocrinology; primary structure of pituitary body hormones; corticotropin, β-lipotropin, prolactin and somatrotopin); Rice 1977 (Special topic; biological data; N.E. Pacific); Rzhavskaya & Mrochkov 1967 (Lipid; bibliography; characteristics of fats from various body parts); Saiki & Mori 1953d (Lipid; property of oil from various body tissues & stomach content); Saito & Yokoyama 1954 (Endocrinology; Langerhans' islet and insulin extraction); Sano et al. 1965 (Lipid; fatty acid composition of oil); Sano 1966c (Lipid; identification of 3,7,11,15-tetramethylhexadecanoic acid), 1967a (Lipid; identification of 4,8,12-trimethyltridecanoic acid; Antarctic); Sano & Murase 1965 (Lipid; fatty acid composition of blubber oil); Schmidt-Nielsen & Frog (Lipid; proximate composition; milk & lactation); Shoubridge et al. 1976 (Enzyme; diving; carbohydrate & energetics; evolution & taxonomy; LDH isozyme patterns for biochemical adaptation to diving); Suyama & Maruyama 1969b (Protein; carnosine, anserine & balenine in muscle); Suzuki & Mitsuhashi 1969 (Lipid; lipid & fatty acid composition of tendons; sterols & alcohols); Takao et al. 1949 (Enzyme; protein; stomach pepsin); Takemura 1927a (Protein; milk & lactation; protein content of milk); Travis et al. 1971 (Haematology; protein; electrophoresis of hemoglobins & haptoglobins), 1972 (Haematology; protein; immunoglobins; structure); Tsuchiya & Tanaka 1955 (Lipid; vitamin; vitamin A, cholesterol & hydrocarbon of liver); Watkins & Schevill 1979 (Food; feeding behavior); Yadaev et al. 1982 (Endocrinology; somatotropin, amino acid sequence); Yamagawa & Yasaka 1926 (Nucleic acid; pancreatic nucloprotein; spleen histone, nucleoprotein; nucleic acid analysis & P content); Yoneda 1974 (Enzyme; protein; properties & preparation of carboxypeptidase A), 1980 (Enzyme; protein; amino acid compositions & protein form of pancreatic procarboxylpeptidase A & electrophoresis); Zama & Igarashi 1957 (Lipid; brain phospholipids (PC, PS, PI & PE) & their fatty acid composition), 1959a (Blood; brain phospholipids (PS & PE) & their fatty acid composition), 1959b (Lipid; brain phospholipid (PI) & its fatty acid composition); Zama 1963 (Lipid;

composition of phospholipids & their fatty acids in tissues).

Balaenoptera brydei

Kawamura 1982 (Food; stomach contents; food habits; N. Pacific Ocean & prey distribution; zooplankton Calanus, Euphausia, Thysanoessa, Nematoscelis, Sergestes, Vinciguerria, Scomber, Cololabis, & Pseudopentaceros); Rice 1977 (Special topic; biological data; N.E. Pacific).

Balaenoptera davidsoni

Xu et al. 1983 (Special topic; food; reproduction; eat Ammodytes & Euphausia; body length & embryo length).

Balaenoptera edeni Anderson, 1878 (Bryde's whale)

Kawamura 1977 (Food; stomach content; crustacea of S. Pacific-Indian Ocean), 1980a (Food; stomach content; crustaceans; Pacific & Indian Oceans); Kawamura & Hamaoka 1981 (Food; stomach contents; eat fish, Vinciguerria nimbaria, & crustaceans in S.W.N. Pacific); Kawamura 1982 (Food; stomach contents, food habits; N. Pacific Ocean & prey distribution; zooplankton Calanus, Euphausia, Thysanoessa, Nematoscelis, Sergestes, Vinciguerria, Scomber, Cololabis, & Pseudopentaceros); Nemoto & Kawamura 1977 (Food; food habits & distribution in N. Pacific).

Balaenoptera musculus Linnaeus, 1758 (blue whale; great whale; Sibbold's rorqual)

Abe & Soda 1953 (Lipid; isolation of lipids from baleens & body; wax & sterols); Betesheva 1961 (Food; Kurile region); Boe et al. 1951 (Endocrinology; adrenocorticotropic hormone (pituitary prolactin) extraction); Borisov 1969b (Evolution & taxonomy; haematology; protein; antigenic properties of serum proteins); Braekkan 1948 (Vitamin; vitamins A & D, niacin, riboflavin & thiamine in liver, blubber areas & tongue); Denton 1963 (Lipid; special topic; buoyancy mechanism; long-chain fatty acids; review of lipids on buoyancy); Fujino 1962 (B.m. brevicauda; evolution & taxonomy; haematology; blood types); Gregory et al. 1955 (Carbohydrate & energetics; mineral; lipid; protein; vitamin; milk & lactation; composition milk); Hennings 1950 (Endocrinology; ACTH content in hypophysis; pituitary); Hirao et al. 1950 (Vitamin; vitamin A content of oil); Ishihara 1960 (Enzymes; protein; crystalline stomach pepsin); Kendrew et al. 1954 (Evolution & taxonomy; myoglobin; spp. specificity of myoglobins); Krogh 1934 (Special topic; physiology); Mackintosh & Wheeler 1928 (Special topic; report); Miyazaki et al. 1974 (Endocrinology; TSH content in posterior pituitary gland); Mori & Asakawa 1941 (Vitamin; vitamin A content of liver); Mrochkov 1951 (Vitamin; vitamin A content of liver; Antarctic); Nagano et al. 1969 (Lipid; fatty acid composition; branched C_4-C_{12} fatty acids); Nakayama 1950 (Vitamin; vitamin A content of liver & fecal oil); Novikova 1953 (Vitamin; vitamins B_1 & B_2 in liver, heart, tongue & brain); Okura & Mori 1957 (Lipid; quality & properties of oil); Okura & Nagata 1957 (Lipid; properties of oil; Antarctic; iodine No. annual variations); Okura et al. 1957a (Lipid; oil content in blubber & iodine No. of oil); Pederson 1952a (Lipid; carbohydrate & energetics; proximate composition; lipid; ash, dry matter, and sugar content of milk); Pike 1950 (Food; crustaceans; Canadian); Rewell & Willis 1949 (Special topic; tumors); Rzhavskaya & Mrochkov 1967 (Lipid; bibliography; characteristics of lipid from various body parts); Sabasi et al. 1950 (Vitamin; biological potency of liver vitamin A); Sano et al. 1965 (Lipid; fatty acid composition of oil); Sano 1966b (Lipid; fatty acid composition in bone oil; iso & anteiso fatty acids & phytanic acid; Antarctic), 1967a (Lipid; identification of 4,8,12-trimethyltridecanoic acid); Schmidt-Nielson et al. 1933 (Lipid; oil; color); Schmidt-Nielsen & Frog 1933 (Lipid; proximate composition; milk & lactation); Schmidt-Nielsen et al. 1933 (Lipid; lipochrome in oil); Shoubridge et al. 1976 (Enzyme; diving; carbohydrate & energetics; evolution & taxonomy; LDH isozyme patterns; biochemical adaptation to diving); Slijper 1948 (Special topic; thickness of blubber); Stolk 1950 (Special topic; tumor); Stolk 1953b (Special topic; hepatic cirrhosis); Stolk 1954b (Special topic; hepatic cirrhosis); Thompson & Friedl 1982 (Biological sonar; special topic; long-term study of low-frequency sounds off Oahu, Hawaii; seasonal migration & distribution); Thuesen 1953 (Lipid; cholesterol content of liver oil); Tveraaen 1935 (Proximate composition; lipid; chemical analysis of oils); Vladimirtseva et al. 1981 (Special topic; influenza virus); Wheeler 1929 (Product; special topic; changes in condition of blubber); Yamada 1946 (Lipid; fat distribution in corium layers of skin).

Balaenopterus physalus Linnaeus, 1750 (fin whale; common rorqual; finback whale)

Abe & Soda 1953 (Lipid; isolation of lipid from baleens; body wax & sterols); Ackman & Eaton 1966 (Food; lipid; 20:1 and 22:1 fatty acids are derived from zooplankton, Meganyctiphanes norvegica); Ackman et al. 1968 (Lipid; milk & lactation; lipid content, fatty acid comparison of triglycerides (positional distribution) and phospholipids of milk; N. Atlantic), 1965a (Lipid; fatty acid composition of whale blubber & blubber sections; N. Atlantic), 1965b (Lipid; fatty acid composition of liver; 19:4ω5, N. Atlantic), 1971c (Lipid; fatty acid composition of blubber fats; N.W. Atlantic), 1975c (Lipid; blubber fat deposition); Ackman & Hooper 1968 (Lipid; milk & lactation; isoprenoid fatty acids; 4,8,12-trimethyltridecanoic acid; L,D,D- and D,D,D-diastereomers of pristanic & phytanic acids); Ackman & Sipos 1965 (Lipid; even- and odd-numbered and branched chain fatty acids of blubber); Aguilar & Jover 1982 (Toxic compounds; PCB & DDT residues; N. Atlantic); Arnason et al. 1976 (Nucleic acid; liver DNA), 1978 (Nucleic acid; DNA); Atassi & Saplin 1966 (Myoglobin; electrophoresis; physicochemical & immunological characterization & amino acid composition); Baker & Lauer 1971 (Carbohydrate &

energetics; milk & lactation; carbohydrate content of casein); Beare-Rogers 1969 (Lipid; reaction of lipoxidase with polyenoic acids in marine oils); Betesheva 1955 (Food; Calanus tonsus; Thysanoessa inermis; T. longipes & Euphausia pacifica), 1961 (Food; Kurile region), 1962 (Food; stomach content; Kurile area); Bőe et al. 1951 (Endocrinology; pituitary prolactin extraction; adrenocorticotropic activity); Borisov 1969b (Haematology; protein; evolution & taxonomy; antigenic properties of serum proteins), 1981a (Protein; haematology; taxonomy & evolution; myoglobin; electrophoresis of hemoglobin & myoglobins); Braekkan 1948 (Vitamin; vitamin A & D, niacin, riboflavin & thiamine in liver, blubber areas & tongue); Brockerhoff & Ackman 1967 (Lipid; milk & lactation; isomers of monoenoic fatty acids in glycerolipids of fat depots; positional distribution); Brodie et al. 1978 (Food; euphausiid, Meganyctiphanes norvegica); Cama & Meara 1953 (Lipid; milk & lactation; milk & blubber fat content & fatty acid composition); Chauvet et al. 1963 (Endocrinology; neurohypophyseal hormones; isolation & characterization of oxytocin & vasopressin), 1978 (Endocrinology; evolution & taxonomy; phylogeny of neurophysins; amino acid composition); Egorova 1964 (Product; vitamin; vitamin A & kitol content change in liver during storage), 1968 (Product; vitamin; vitamin A level change during γ-irradiation); Foglia & Penhos 1954 (Endocrinology; hormone content of hypophysis); Fujino 1962 (Haematology; blood types; Antarctic); Geschwind 1966 (Endocrinology; melanocyte-stimulating hormones from pituitary); Gray et al. 1951b (Product; mineral; vitamins; composition of liver extracts); Hama et al. 1964 (Endocrinology; amino acid sequence of insulin); Hashimoto et al. 1966 (Lipid; monoenoic, dienoic & trienoic fatty alcohols); Hennings 1950 (Endocrinology; ACTH content in hypophysis; pituitary); Henry & Best 1983 (Toxic compounds; DDT, dieldrin & PCB in blubber); Higashi et al. 1950 (Product; lipid; nutritive value of oil & its hardened or polymerized form; digestibility), 1960 (Lipid; nutrition; fatty acids & vitamins; composition (bromide method) of liver from pregnant & non-pregnant); Hirao et al. 1950 (Vitamin; vitamin A content in oil); Hoekstra & Burgers 1967 (Endocrinology; melanophore-stimulating hormones in hypophysis; electrophoresis of 3 component identical with fat mobilizing factor); Howell & Laurence 1930 (Food; Euphausia pacifica & small fish); Irie et al. 1966 (Enzymes; nucleic acids; 2 isozymes of pancreatic ribonuclease; purification & properties); Ishihara 1960 (Enzyme; protein; crystalline stomach pepsin); Jensen et al. 1939 (Endocrinology; gonadotropic activity of anterior pituitary follicle-stimulating hormone, luteinizing hormone, thyrotropic activity & interstitial cell-stimulating hormone); Jonsgard 1966 (Special topic; biology); Kabeno et al. 1970 (Endocrinology; gastrointestinal hormone; active glycoprotein isolated), 1969 (Endocrinology; gastrointestinal hormone; isolation of gastrin & gastrone-like substance from stomach); Kakinuma et al. 1950-51 (Product; lipid; carbohydrate & energetics; nutritional studies of fats fed to rats; specific dynamic action); Kawamura 1975 (Food; special care; available source of energy & its cost of locomotion; seasonal migration), 1982 (Food; stomach contents; food habits; N. Pacific Ocean; prey distribution; zooplankton Calanus, Euphausia, Thysanoessa, Nematoscelis, Sergestes, Vinciquerria, Scomber, Cololabis, & Pseudopentaceros); Kawauchi et al. 1980 (Endocrinology; isolation & characterization of β-lipotropin from pituitary gland); Kawauchi & Tubokawa 1979 (Endocrinology; isolation & characterization of prolaction from pituitary gland); Kawauchi et al. 1978 (Endocrinology; isolation & primary structure of adrenocorticotropin (ACTH)); Kendrew et al. 1954 (Evolution & taxonomy; myoglobin; spp. specificity of myoglobins); Kitagawa et al. 1973 (Endocrinology; adrenergic activity from liver hydrolysate); Klumov 1961 (Food; eat 1.0-1.5 metric tons/day); Koide & Matsuoka 1969 (Enzyme; protein; purification of pancreatic anionic chymotrypsin & trypsin), 1970 (Enzyme; protein; properties of anionic pancreatic chymotrypsin), 1971a (Enzyme; protein; properties of cationic pancreatic trypsin), 1971b (Enzyme; protein; properties of cationic pancreatic chymotrypsin); Kristoffersen et al. 1961 (Identification 20 β-hydroxypregn-4-ene-3-one in luteal tissue of pregnant); Kusakabe et al. 1962 (Protein; content of anserine, carnosine, creatine & amino acids); Kusakari & Tsutsui 1927 (Mineral; Ca & P in tissues); Lauer & Baker 1969a (Lipid; milk & lactation; proximate composition; fatty acid composition; milk); Lesch 1969 (Lipid; development of neutral lipids & fatty acids in brain of man, whale, & dolphins); Lesch & Bernhard 1968 (Lipid; composition of neutral lipids & their fatty acids from 5 regions of brain); Lloyd et al. 1963 (Carbohydrate & energetics; cartilage amino polysaccharide sulfates); Lockyer 1978 (Nutrition; reproduction; theoretical approach to growth & energy budget, to female reproduction); Ludowieg et al. 1972 (Carbohydrate & energetics; composition of nucleus pulposus during development & aging; polysaccharides); Lunde 1970 (Toxic compounds; As & Se in tissues); Mackintosh & Wheeler 1928 (Special topic; report); Matsumura 1950/51 (Lipid; product; effect of oil on humans); Matsuno 1964 (Carbohydrate & energetics; lipid; lung heparin & its lipemia-clearing activities); Matsuoka & Koide 1966 (Enzyme; protein; anionic & cationic chymotrypsin); Matthews 1932 (Food; eat crustaceans); Mednikov & Shubina 1976 (Nucleic acid; DNA); Mitchell 1972a (Special topic; assessment of N.W. Atlantic stocks); Mrochkov 1951 (Vitamin; vitamin A content in liver; Antarctic); Mrochkov & Baidalinova 1974 (Protein; nucleic acid; proximate composition; mineral; product; lipid; lipid content; amino acid composition of meat; Co, Mn, Sn, anserine, carnosine & purine); Nagasawa et al. 1956 (Endocrinology; follicular hormones; estrone & estradiol in ovary), 1964 (Carbohydrate & energetics; heparin); Nakai et al. 1963 (Protein; product; nitrogenous compounds in muscle extract); Nakamura et al. 1968 (Lipid; separation & characterization of fatty amides from visceral lipids); Nakamura & Toyomizu 1967 (Lipid; analysis of visceral lipid; neutral lipid composition), 1970 (Lipid; preparation of

fatty acid amides from visceral lipids; analysis); Nakayama 1950 (Vitamin; vitamin A content in liver & fecal oil); Nikolaeva 1954 (Enzyme; protein; amino acid composition of meat); Nikonova 1957 (Lipid; protein; oil content of blubber); Novikova 1953 (Vitamin; vitamin B_1 and B_2 in liver, heart, tongue & brain); Ohta et al. 1955 (Milk & lactation; proximate composition); Okada et al. 1953 (Special topic; polarographic studies on odors); Okura & Mori 1957 (Lipid; properties of oil); Okura & Nagata 1957 (Lipid; properties of oil; iodine No., annual variation; Antarctic); Okura et al. 1957b (Lipid; oil content of head & blubber; iodine No. of oil; Antarctic); Omura 1950 (Special topic; body weight; adjacent waters of Japan); Oseki 1934 (Product; vitamin; nutritive value & vitamin A & E content of liver); Osterberg et al. 1964 (Toxic compounds; Zn-66, K-40; Mn-54, Cs-137, Zn-95, Nb-95, Ce-141,144 & Ru-103,106; gamma-emitting elements); Otatani et al. 1982 (Carbohydrate & energetics; structure & biological activity of heparin octasaccharide; NMR, enzymic & biological studies); Overholtz & Nicolas 1979 (Food; eat Ammodytes americanus; N.W. Atlantic); Pankov et al. 1976b (Endocrinology; primary structure (amino acid sequence) of corticotropin), 1977 (Endocrinology; amino acid sequence of corticotropins); Raga et al. 1982 (Special topic; stranded on Spanish Mediterranean coast); Ray et al. 1978 (Special topic; radio tracking); Rorvik et al. 1976 (Food; krill, M. norvegica; coast of Iceland); Rzhavskaya & Mrochkov 1967 (Lipid; bibliography; characteristics of edible fats; various body parts); Rzhekhin & Pogonkina 1966 (Lipid; fatty acid composition of blubber; Antarctic); Sabasi et al. 1950 (Vitamin; biological potency of liver vitamin A); Sachitananthan & Hijama 1965 (Toxic compounds; mineral; gamma-emitting elements; Cs-137, Zn-65, Zn, Mn, Cs & K); Saiki & Mori 1953d (Lipid; oil properties of various body tissues & stomach content); 1956 (Food; lipid; lipid conten- & fatty acid composition of stomach contents (Calanus cristatus); N. Pacific); Saito & Yokoyama 1954 (Endocrinology; insulin extraction); Samuels et al. 1970 (Toxic compounds; Sr-90 & Cs-137 levels in tissues); Sano et al. 1965 (Lipid; fatty acid composition of oil); Sano 1966a (Lipid; fatty acid composition of blubber; polybranched and unsaturated branched fatty acids; Antarctic), 1966c (Lipid; identification of 3,7,11,15-tetramethylhexadecanoic acid), 1967a (Lipid; identification of 4,8, 12-trimethyltridecanoic acid; Antarctic), 1967b (Lipid; identification 7-methyl-6-hexadecenoic acid in blubber oil; Antarctic); Sasano & Ota 1964 (Enzyme; protein; pancreatic proteolytic enzymes); Saschenbrecker 1973 (Toxic compounds; levels of DDT & PCB); Schmidt 1950 (Vitamin; assay of vitamin A; British Columbia); Schmidt-Nielsen & Frog 1933 (Lipid; milk & lactation; proximate composition; composition of milk); Schmidt-Nielsen & Johansen 1932 (Mineral; proteins; composition of urine; uric acid, hippuric acid, protein, creatinine, ash, total solid, PO_4, Cl, Ca, Mg, Na & F); Sergeant 1966 (Special topic; population in N.W. Atlantic); Shoubridge et al. 1976 (Diving; carbohydrate & energetics; enzyme; evolution & taxonomy; LDH isozyme patterns; biochemical adaptation to diving); Sleptsov 1961c (Special topic; results in weighing; Far East); Slijper 1948 (Special topic; blubber thickness); Stolk 1950 (Special topic; tumor); Suyama et al. 1977 (Protein; amino acid, balenine & peptides in muscle); Sverdrup & Arnesen 1952 (Endocrinology; study of anterior lobe of hypophysis; diagnosis of pregnancy); Tachibana et al. 1972 (Endocrinology; toxicity of glycopeptide from gastric mucosa); Takahashi et al. 1966 (Lipid; cardiolipin & its fatty composition of heart); Takaoka et al. 1953 (Endocrinology; insulin); Takeda et al. 1957 (Lipid; oil; iodine No. & refractive index correlation); Takemura 1927a (Protein; milk & lactation; protein content of milk); Thompson & Friedl 1982 (Biological sonar; special topic; long-term study of low-frequency sounds off Oahu, Hawaii; seasonal distribution & migration); Tower & Young 1973 (Enzyme; carbohydrate & energetics; minerals; brain acetyleholine esterase activity; chloride content of brain); Toyama & Takagi 1962 (Lipid; 20:5ω3; 22:5ω3; and 22:6ω3 in oil); Travis et al. 1971 (Protein; haematology; electrophoresis of hemoglobin and haptoglobin), 1972 (Haematology; protein; immunoglobins; structure); Tsubokawa et al. 1980 (Endocrinology; isolation & characterization of growth hormone (somatotropin) of pituitary gland); Tsuchiya & Kato 1950b (Lipid; highly unsaturated hydrocarbon in liver, $C_{45}H_{78}$); Ueno & Tsuichikawa 1942 (Lipid; composition of hydrogenated oil); Viale 1979 (Lipid; mineral; excretory function of skin; salt excretion; lipid synthesis); Vliegenthart 1964 (Endocrinology; neurohypophyseal hormones; oxytocin, lysine & arginine vasopressin; antidiuretic hormones); Watkins 1981 (Biological sonar; special topic; activities & underwater sounds); Watkins & Schevill 1979 (Food; feeding behavior); Wheeler 1929 (Special topic; lipid; changes in condition of blubber); Yamada 1946 (Lipid; molting; proximate composition; fat distribution of corium layers of skin); Yamagawa & Shibuya 1926 (Protein; amino acid composition of muscle); Yanuras et al. 1972 (Endocrinology; teratogenic effects of gastric mucosa extracts (hormones) on rats & mice); Yazawa 1935 (Protein; nitrogenous compounds); Zemskii 1958 (Thermoregulation; morphological adaptation of newborn from Antarctic).

Balaenoptera sibbaldi (blue whale)

Gregory et al. 1955 (Lipid; mineral; carbohydrate & energetics; milk & lactation; vitamin; milk composition).

Megaptera nodosa (humpback whale)

Ackman et al. 1975c (Lipid; blubber fat deposition); Beck 1961 (Mineral; liver Cu levels of fetal & newly born); Bentley 1963 (Water; mineral; protein; Na, K & urea in urine during fasting; metabolic water of tissues); Betesheva 1961 (Food; Kurile region); Gray et al. 1951b (Product; mineral; vitamin; composition of liver extract); Howell & Laurence 1930 (Food; eat Euphausia pacifica & small fish); Huber et al. 1982 (Special topic; sighting off Gulf of

Farallones, California); Pedersen 1952a (Lipid; milk & lactation; carbohydrate & energetics; proximate composition; lipid; water, ash, dry matter & sugar content of milk; iodine No., saponification No., unsaponifiable matter & fatty acids); Rzhavskaya & Mrochkov 1967 (Lipid; bibliography; characteristics of fats from various body parts); Townsend 1935 (Special topic; distribution; logbook of American whaleships); Yamada 1946 (Lipid; fat distribution of corium layers of skin).

Megaptera novaeangliae (Borowski, 1781) (humpback whale)

Ackman et al. 1975c (Lipid; blubber fat deposition); Bryant et al. 1981 (Food; krill availability & whale distribution; S. Alaska); Hain et al. 1982 (Food; feeding behavior; N.W. Atlantic); Jurasz 1975 (Food; bubble net feeding); Jurasz & Jurasz 1979 (Food; eat euphausiids, herring & capelin; method of feeding in S.E. Alaska); Klumov 1961 (Food; eat 1.0-1.5 metric tons/day of plankton); Lehman 1980 (Myoglobin; structure); Lesch & Bernhard 1966 (Lipid; brain lipids; cortex & cerebellum; cholesterol, cerebroside, sphingomyelin & lecithins & their fatty acid composition); Matthews 1932 (Food; eat crustaceans); Mrochkov 1951 (Vitamin; vitamin A content of liver; Antarctic); Overholtz & Nicolas 1979 (Food; eat Ammodytes americanus; N.W. Atlantic); Papkoff & Li 1958 (Endocrinology; isolation & characterization of growth hormone; anterior pituitary lobe); Perkins et al. 1982 (Food; feeding; W. coast of Greenland & Labrador, Newfoundland, Canada); Pike 1950 (Food; eat crustaceans; Canadian); Pilleri 1966 (Special topic; brain lipoma); Reichert 1962 (Enzyme; protein; proteinases of pituitaries); Schmidt 1950 (Vitamin; assay of liver vitamin A; British Columbia); Sergeant 1982 (Special topic; mass stranding); Shoubridge et al. 1975 (Carbohydrates & energetics; diving; enzyme; evolution & taxonomy; protein; amino acids; biochemical adaptation to diving); Suyama et al. 1977 (Protein; amino acid, balenine & peptides in muscle); Taruski et al. 1975 (Toxic compounds; DDT, PCB, chlordane & dieldrin in blubber); Thompson & Friedl 1982 (Biological sonar; special topic; long-term study of low-fequency sounds off Oahu, Hawaii; seasonal migration & distribution); Travis et al. 1971 (Haematology; protein; electrophoresis of hemoglobin & haptoglobin), 1972 (Haematology; hemoglobin; protein; immunoglobins; structure); Watkins & Schevill 1979 (Food; feeding behaviour); Whitehead 1983 (Food; special topic; structure & stability of groups off Newfoundland, Canada); Whitehead & Moore 1982 (Food; special topic; distribution & movements in winter of W. Indian Ocean); Whitehead et al. 1982 (Special topic; migration off N.E. Newfoundland).

Mystoceti; Eschrictiidae

Eschrichtius gibbosus Erxleben, 1777 (California gray whale)

Garner et al. 1973 (Myoglobin); Gilmartin et al. 1974 (Haematology; physiological parameters of blood); Huber et al. 1982 (Special topic; sighting in Gulf of Farallones, California); Matthews 1932 (Food; eat crustaceans); Pike 1962 (Food; feeding & migration); Shire et al. 1975 (Myoglobin; electrostatic effects in myoglobin application of Tanford-Kirkwood theory to myoglobin); Zettner 1974 (Haematology; hematological observations); Zimushko & Linskaya 1970a (Food; feeding on foraging grounds), 1970b (Food; feeding in foraging grounds).

Eschrichtius glaucus Cope

Darling 1977 (Special topic; aspects of behavior & ecology).

Eschrichtius robustus

Carlton & Schevil 1974 (Care; food; feeding captive whales); Curran & Asher 1974 (Special topic; blubber thickness by ultrasonography); Gill & Hall 1983 (Special topic; eat Crangon seasonally; use of nearshore and estuarine area of S.E. Bering Sea); Herwig et al. 1983 (Lipid; stomach microbial formation of volatile fatty acids); Hessing 1981 (Special topic; spring migration into Bering Sea); Howell & Laurence 1930 (Food; eat Euphausia pacificus & small fish); Marquette & Braham 1982 (Special topic; Inuit; distribution & catch; Alaska); Mate et al. 1983 (Special topic; new attachment device for radio tagging large whales); Medway 1974 (Carbohydrate & energetics; haematology; coagulation factors in plasma); Nerini & Oliver 1983 (Food; structure of Bering Sea benthos; eat amphipod, Ampelisca macrocephala); Norris et al. 1982 (Special topic; lagoon entrance & other aggregations); Oliver et al. 1983a (Food; eat polychaetes, bivalves & crustaceans; comparison of Bering Sea & Baja, California, Mexico feeding areas); Ray & Schevill 1974 (Food; care; nutrition; feeding of captive); Reilly et al. 1983 (Special topic; population assessment; California, U.S.A. shore census 1967-1980; seasonal migration); Rice 1978 (Special topic; general); Rice & Wolman 1971 (Special topic; life history & ecology); Rugh & Braham 1979 (Special topic; fall migration; Unimak Pass Alaska; 1977); Sokolova 1969 (Toxic compounds; artifical radioactivity in tissues); Sumich 1983 (Special topic; lipid; cost of locomotion in migration); Sund 1975 (Food; special topic; evidence for feeding during migration & an early birth of calves); Sweeney & Mattson 1974 (Special topic; surgical attachment of telemetry device to dorsal ridge of yearling); Votrogov & Bogoslovskaya 1980 (Special topic; off Chukotka Peninsula); Wang et al. 1979 (Myoglobins); Wellington & Anderson 1978 (Food; stomach contents; kelp, mysids & sculpins); Wolman & Wilson 1970 (Toxic compounds; DDT & dieldrin in brain, liver & blubber); Zimushko & Ivashin 1980 (Special topic; whaling).

Odontoceti; Delphinidae

Cephalorhynchus commersoni (Lacépède, 1804) (Commerson's dolphin; piebald porpoise; Le Jacobite)

Pilleri 1983 (Biological sonar; sonar system); Shochi et al. 1982 (Biological sonar; characteristics and directional properties of sonar signal emitted by captive); Spotte et al. 1979 (Care; captivity).

Delphinus delphis Linnaeus, 1758 (common dolphin)

Alzieu & Duguy 1979 (Toxic compounds; PCB, DDT, DDE & DDD in blubber, muscle, liver, kidney, stomach and in unborn); André 1947 (Lipid; bibliography; oil; literature review); André & Maille 1947 (Lipid; head oil; spermaceti; saponification values); Atanasov 1966 (Myoglobin; physicochemical properties of metmyoglobin); Atanasov & Mitova 1970 (Myoglobin; reversible thermal denaturation of ferrimyobin derivatives); De Monte & Pilleri 1968a (Haematology; protein; electrophoresis of plasma proteins of fractions (albumin; proalbumin; several post-albumins); hemoglobin electrophoresis), 1968b (Haematology; protein; electrophoretic mobility of hemoglobin; observation on plasma protein fractions); Gallien et al. 1967 (Haematology; protein; taxonomy & evolution; serum proteins, prealbumins, albumins, transferrin & globulins; electrophoresis, 21 fractions), 1970 (Haematology; taxonomy & evolution; population studies; protein; immunoelectrophoresis of serum proteins, 21 fractions; transferrin); Horvath et al. 1968 (Haematology; taxonomy & evolution; respiratory & electrophoretic characteristics of hemoglobins); Hui 1979 (Water; sea water consumption), 1981 (Mineral; water; sea water consumption; water flux; metabolic water; Na); Hussein et al. 1982 (Enzyme; product; production of pancreatin); Jones 1981 (Food; food habits; N. California, U.S.A.); Karadzova et al. 1964 (Myoglobin; isolation & properties of myoglobin); Koeman et al. 1973b (Hg-Se correlations in marine mammals); Kuznetsov 1979 (Special topic; chemoreception; detect caproic, citric, oxalic and picric acids, indole & NaCl, but not sucrose or glucose); Lantz & Gunasekera 1956 (Product; proximate composition; edible flesh, skin, head, bone, tail, fin, liver, intestine & other viscera); Lesch 1969b (Lipid; development of neutral lipids and fatty acids in brain of unborn & mature); Litchfield & Greenberg 1974 (Biological sonar; lipid; melon fat; comparative lipid patterns; triglycerides and wax esters contain isovaleric acid); Nikitenko 1963 (Special topic; brain morphology; weight of different brain parts); Rankov & Iovchev 1955 (Product; vitamin; lipid; vitamin A content & oil characteristics of subcutaneous fats under different rendering conditions), 1954 (Lipid; yield & characteristics of blubber oil; dependent on duration of melting time); Sokolov 1961 (Reproduction; reproductive phase determination, use vaginal smear); Suyama & Maruyama 1969b (Protein; carnosine, anserine and balenine in muscle); Suzuki et al. 1983 (Enzyme; lipid; carbohydrate & energetics; nucleic acid; vitamin; histological properties of myofibers of longissimus muscle; ATPase; glycerol-3-phosphate; menadione oxido-reductose; lipid oxidative metabolism; glycolytic metabolism); Varanasi & Malins 1975 (Biological sonar; lipid; brain lipids; phosphoglycerides rich in isovaleric & long-chain iso-acids), 1982 (Biological sonar; lipid; role of isovaleric lipids in channeling sound in melon); Viale 1979 (Lipid; mineral; excretory function of skin; salt excretion; lipid synthesis); Wedmid & Litchfield 1976 (Biological sonar; lipid; positional analysis of triglycerides using PMR with shift reagents).

Delphinus longirostris

Tsuchiya 1943 (Lipid; polyunsaturated fatty acids in liver oil); Tsuchuja & Kato 1950a (Lipid; hydrocarbons in fatty matter of liver; Delphane, $C_{44}H_{90}$).

Delphinus sp.

Kato & Shimada 1970 (Protein; isolation of ferritin from spleen).

Lagenodelphis hosei (F.C. Fraser)

Robison & Craddock 1983 (Food; nutrition; stomach content; nutritional value prey size selection).

Lagenorhynchus acutus Gray, 1828 (Atlantic white-sided dolphin)

Geraci et al. 1978 (Special topic; mass stranding; pathobiology; life history); Sergeant 1982 (Special topic; mass stranding).

Lagenorhynchus albirostris Gray, 1846 (white-beaked dolphin)

Arnason 1982 (Nucleic acid; DNA); Arnason et al. 1982 (Taxonomy & evolution; nucleic acid; DNA); Kerkhoff et al. 1981 (Toxic compounds; heptachlor epoxide); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns in melon fat; isovalerate lipids; long-chain wax esters); Wedmid & Litchfield 1976 (Biological sonar; lipid; positional analysis of triglycerides using PMR with shift reagents).

Lagenorhynchus obliquidens (Gill, 1865) (Pacific white-sided or Pacific white-stripped dolphin)

Border 1975 (Taxonomy & evolution; haematology; protein; hemoglobin electrophoresis); Fiscus et al. 1980 (Food; California & Washington); Horwath et al. 1968 (Haematology; taxonomy & evolution; respiratory & electrophoretic characteristics of hemoglobins); Huber et al. 1982 (Special topic; sighting in Gulf of Farallones, USA, 1971-1979); Jones 1981 (Food; food habits; N. California; 11 spp.); Kajimura et al. 1981 (Food; California & Washington); Medway et al. 1970b (Anaesthesia; enzyme; protein; prolonged halothane anaesthesia on serum glutamic oxaloacetic transaminase, ornithine carbamyltransferase, alkaline phosphatase, lactic dehydrogenase and total protein); Ridgway et al. 1968 (Enzyme; haematology; lipid; protein; chemical & physical characteristics of blood; serum glutamic oxaloacetic transaminase; leukocytes; eosin-

ophil; serum BUN, NaCl, K & cholesterol); Sterling et al. 1975 (Endocrinology; thryoid hormone metabolism; T_3 & T_4 concentrations).

Lagenorhynchus obscurus Gray, 1828 (dusky dolphin)

Koeman et al. 1973b (Toxic compounds; Hg-Se correlation in marine mammals); Würsig 1976 (Special topic; radio tracking).

Lissodelphis borealis (Peale, 1848) (northern right whale dolphin)

Leatherwood & Walker 1973 (Special topic; behaviour; N.E. Pacific); Litchfield et al. 1975 (Biological sonar; lipid; comparative lipid pattern in acoustical & non-acoustical fatty tissues; jaw triglycerides & wax esters; mechanisms of echolocation); Wedmid & Litchfield 1976 (Positional analysis of triglyceride using PMR with shift reagents).

Lissodelphis peroni (Linnaeus, 1758) (southern right whale dolphin)

Baker 1981 (Food; stomach contents; squid & fish).

Sousa plumbea Cuvier, 1829 (Plumbeous dolphin)

Lal Mohan 1982 (Special topic; note on unborn; S.W. coast of India).

Sotalia fluviatilis (Gervais & De Ville, 1853) (Amazon dolphin; buffeo negro; tucuxi; pirayaguara)

Ackman et al. 1975a (Biological sonar; lipid; lipid composition of melon, jaw & blubber; isovaleryl wax esters & diisovaleryl triglycerides); Litchfield et al. 1971a (Lipid; biological sonar; comparative lipid patterns); Wedmid & Litchfield 1976 (Lipid; positional analysis of triglyceride using PMR with shift reagents).

Sotalia guianensis (Van Bēnēden, 1864) (Guiana dolphin)

Koeman et al. 1973b (Toxic compounds; Hg-Se correlation); Pilleri 1982 (Biological sonar; sense of vision & sonar field of some cetaceans).

Stenella attenuata Gray, 1846 (white-dotted dolphin; slender-beaked porpoise)

Castellini et al. 1981 (Carbohydrate & energetics; enzyme; glycolytic enzymes in tissues; lactate dehydrogenase & pyruvate kinase); Morii & Kanazu 1972 (Lipid; fatty acid composition in unborn, nurseling & adult); Morii 1982a (Lipid; milk & lactation; fatty acid composition of milk; short chain & long chain fatty acids); Myrick et al. 1983 (Special topic; estimation of age from teeth); Smith 1983 (Special topic; change in size of population); Solntseva 1983 (Biological sonar; early development of acoustic analyzer in peripheral region); Stuntz 1981 (Care; enzyme; relationship between passive behaviour & capture stress; serum enzymes).

Stenella coeruleoalba (Meyen, 1833) (blue-white dolphin; little toothed whale)

Alzieu & Duguy 1979 (Toxic compounds; PCB, DDT, DDE & DDD in blubber, muscle, liver, kidney, stomach & in unborn); Arima & Nagakura 1979 (Toxic compounds; Hg & Se in muscle of fetal & adult); Honda et al. 1982 (Toxic compounds; heavy metal distribution in muscle, skin, gonad, kidney & bone), 1983 (Toxic compounds; heavy metal concentrations in muscle, liver & kidney & their variations with body length, weight, age and sex); Kanazu et al. 1969a (Lipid; branched chain fatty acids in head oil), 1969b (Lipid; higher branched-chain fatty acids in head oil); Konogaya 1963 (Haematology; amino acid sequence of hemoglobin); Matsui et al. 1975a (Enzyme; myoglobin; diaphorase; methmyoglobin reducing-enzyme system in muscle), 1975b (Enzyme; myoglobin; purification & physicochemical properties of ferrimyoglobin reductase); Miyazaki 1977 (Nutrition; reproduction; growth & reproduction; Pacific coast of Japan); Morii 1973 (Lipid; free volatile fatty acids of microorganisms isolated from stomach), 1974b (Lipid; fatty acid composition of microorganisms isolated from stomach), 1979a (Lipid; free volatile fatty acids of stomach microorganisms), 1979b (Lipid; production short- & long-chain branched fatty acids of stomach Vibrio sp. media), 1979c (Protein; lipid; amino acid, ammonia & volatile fatty acids in stomach fluid), 1979d (Lipid; long-chain branched (iso & anteiso) fatty acids in stomach contents), 1980 (Lipid; distribution of branched-chain fatty acids in muscle, adipose, melon, jaw and subcutaneous tissues of nursing & unborn), 1981 (Haematology; lipid; fatty acids in blood, blood plasma, proteins & erythrocytes), 1982b (Lipid; fatty acids & fatty alcohols of triglycerides & wax esters of subcutaneous tissues); Morii & Kaneda 1982 (Lipid; biosynthesis of branched-chain fatty acids from branched-chain amino acids in subcutaneous tissue (melon, blubber, liver & muscle of adult)); Raduan & Raga 1982 (Special topic; beaching in Valencia region, Spain); Raga et al. 1982 (Special topic; stranded on Spanish Mediterranean coast); Shimizu & Matsuura 1962 (Enzyme; haematology; physicochemical properties of crystalline carbonic anhydrase from erythrocytes), 1971 (Enzyme; myoglobin; methmyoglobin reductase in muscle & erythrocytes); Suyama et al. 1977 (Lipid; protein; amino acids, balenine and free fatty acids); Tanabe et al. 1982 (Toxic compounds; transplacental transfer of PCB & chlorinated hydrocarbons), 1981 (Toxic compounds; distribution & total burden of chlorinated hydrocarbons (PCB; H_6Cl_6 isomers; hexachlorobenzene) in whole body & tissue organs of females and unborn; mostly in blubber); Viale 1978 (Toxic compounds; Fe, Ti, Cr, V, Cd, Rb & Hg in skin, blubber, muscle, liver, lung, kidney & brain).

Stenella frontalis (G. Cuvier, 1829) (bridled dolphin)

Arnason et al. 1982 (Taxonomy & evolution; nucleic acid; DNA).

Stenella graffmani (Lönnberg, 1934) (Graffman's porpoise)

Varanasi et al. 1975 (Biological sonar; lipid; molecular bases for formation of lipid sound-lens in echolocating cetaceans; mono-, di-, tri- and no valeryl triglycerides; wax esters with valeric acid).

Stenella longirostris Gray, 1871 (long-beaked or spinner porpoise; long-snouted dolphin)

Gaskin et al. 1974 (Toxic compounds; Hg, PCB & dieldrin in muscle, kidney, liver & blubber; St. Lucia, Lesser Antilles); Myrick et al. 1983 (Special topic; estimation of age from teeth); Robineau & Rose 1983 (Special topic; Gulf of Aden water of Djibouti Indian Ocean; pigmentation); Smith 1983 (Special topic; changes in size of population).

Stenella plagiodon (Cope, 1866) (spotted dolphin)

Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns in the melon fats; isovalerate lipids; long-chain wax esters); Pilson & Waller 1970 (Milk & lactation; composition of milk); Walker et al. 1975 (Nucleic acid; nucleotide sequence of 5S-ribosomal ribonucleic acid); Wedmid & Litchfield 1976 (Positional analysis of triglyceride using PMR with shift reagents).

Stenella styx Gray, 1846 (Gray's porpoise)

Gallien et al. 1970 (Haematology; taxonomy & evolution; population studies; protein; immunoelectrophoresis of serum proteins).

Stenella sp.

Perrin et al. 1973 (Food; stomach contents; yellow fin, Thunnes albacares), 1979 (Special topic; tagging movements and results in tropical E. Pacific).

Steno bredanensis (Lesson, 1828) (rough-toothed dolphin)

O'Shea et al. 1980 (Toxic compounds; DDE, p,p'-DDT, p,p'-DDT, p,p'-DDE, & PCB in blubber, brain & muscle).

Tursiops aduncus (Ehrenbery, 1833)

Lal Mohan 1982 (Special topic; note on unborn S.W. coast of India); Perkins & Miller 1983 (Special topic; mass strandings at Belize); Saayman et al. 1973 (Special topic; diurnal activity cycles in captive & free ranging in Indian Ocean).

Tursiops gilli (Dall, 1873) (Gill's bottlenosed dolphin; cowfish)

Arima & Nagakura 1979 (Toxic compounds; Hg & Se in adult & fetal Odontoceti); Malins & Varanasi 1972 (Biological sonar; lipid; acoustic tissue contain isovaleric acid; triacylglycerols resistant to porcine pancreatic lipase; triacylglycerides contain isopentadecanoic & isovaleric acids); Nishiwaki & Tobayama 1982 (Special topic; morphological study of fetal growth); Ridgway et al. 1968 (Enzyme; haematology; chemical & physical characteristics of blood; serum eosinophil, leukocyte, glutamic oxoloacetic transaminase, BUN, NaCl, K & cholesterol); Varanasi & Malins 1970a (Biological sonar; lipid; unusual wax esters in mandibular canal; isovaleryl derivatives of fatty alcohol; isovaleric acid & a little isopentyl alcohol), 1971 (Biological sonar; lipid; differences in triacylglycerols and wax esters of acoustic mandibular canal, melon & blubber), 1972 (Biological sonar; lipid; molecular structure of diisovaleryl glyceride of acoustic tissues), 1947a (Biological sonar; lipid; structure of phospholipids & triacylglycerols containing long-chain iso-acids in acoustic tissue, but not in blubber; positional distribution of fatty acids in triacyglycerols).

Tursiops truncatus (Montagu, 1821) (Atlantic bottlenosed dolphin; bottlenosed porpoise)

Ackman et al. 1971b (Lipid; milk & lactation; fatty acid composition of milk triglycerides), 1973 (Lipid; molecular species of wax esters of jaw fat); Amundin & Andersen 1983 (Biological sonar; sound production regulation); Au & Turl 1983 (Biological sonar; target detection in reverberation by echolocating); Border (Taxonomy & evolution; haematology; protein; hemoglobin electrophoresis); Brown & Mayhall 1977 (Enzyme; protein; urea formation in liver; ornithine-urea cycle; ornithine carbamyl transferase activity); Brown et al. 1983b (Nucleic acid; epidermal cell proliferation); Eichelberger 1940 (Mineral; water; distribution of water & electrolytes in muscle); Fetcher & Fetcher 1942 (Mineral; osmotic regulation); Geraci et al. 1983 (Toxic compounds; can detect oil?), 1969 (Carbohydrate & energetics; enzyme; haematology; mineral; protein; serum Na, Cl, Ca, P, urea, uric acid, total protein albumin, globulins and lactic acid; glutamic oxaloacetic transaminase; glutamic pyruvic transaminase); Geraci & Medway 1973 (Special topic; haematology; blood sampling; simulated field studies; stress on haematologic & plasma biochemical parameters), 1974 (Special topic; haematology; simulated field studies; change in haematology & chemistry during blood & plasma storage); Geraci & St. Aubin 1979 (Care; enzyme; protein; tissue sources & diagnostic value of circulating enzymes; plasma, liver & muscle alanine aminotransferase, aspartate aminotransferase, sorbitol dehydrogenase, γ-glutamyl transferase, alkaline phosphatase & creatine kinase); Greenwood & Barlow 1979 (Endocrinology; thryoid function; male & female T_4 & T_3 levels & thyroid-binding capacity); Gruber 1961 (Special topic; ecology in Pass Cavallo area of Matagorda Bay, Texas); Hamilton & Nishimoto 1977 (Food, eat Mugil); Harkness & Grayson 1969 (Carbohydrate & energetics; enzyme; haematology; erythrocyte metabolism; glucose metabolism via hexose monophosphate shunt; phosphoglyceric cycle; glucose-6-phosphate dehydrogenase); Horvath et al. 1968 (Haematology; taxonomy & evolution; respiratory & electrophoretic characteristics of hemoglobins); Irvine et al. 1982 (Special topic; evaluation tagging techni-

ques); Irvine & Wells 1972 (Special topic; results of tagging attempts); Irving et al. 1941 (Carbohydrate & energetics; respiration); Kadane & Penner 1983 (Biological sonar; range ambiguity and pulse-interval jitter echolocation); Koeman et al. 1973b (Toxic compounds; Hg-Se correlation in marine mammals); Kubota et al. 1967 (Protein; physicochemical properties of solubilized collagen of hide); Kuznetsov 1974 (Special topic; chemoreception; use valeric acid), 1979 (Special topic; chemoreception; detect indole, caproic acid, citric acid, oxalic acid, picric acid & NaCl, but not sucrose or glucose); Lewis et al. 1969 (Haematology; coagulation factor 12 deficiency); Litchfield & Ackman 1973 (Biological sonar; lipid; isovalerate & isoamyl wax esters of head fat); Litchfield & Greenberg 1974 (Biological sonar; lipid; melon fat; comparative lipid patterns of cetaceans; triglycerides & wax esters contain isovalerate); Litchfield et al. 1973 (Biological sonar; lipid; compositional topography of melon lipids; implication for echolocation; melon (4 layers) fat content of each aid in collimation of the ultrasonic pulses used for echolocation); Lukhanin 1983 (Special topic; T. t. ponticus; intestinal anatomy); MacKay 1981 (Biological sonar; dolphins interaction with acoustically controlled systems aspects of frequency control of learning & non-food rewards); Malins et al. 1972 (Biological sonar; lipid; biosynthesis of triacylglycerols containing isovaleric acid); Malvin et al. 1971 (Endocrinology; antidiuretic hormone levels; plasma ADH concentration & urine flow rate), 1978 (Endocrinology; mineral; renin & aldosterone levels; correlation between urinary Na encretion & plasma renin; renin-angiotensin-aldosterone axis; regulation of salt balance); Mankovskaya 1975 (Myoglobin; content & distribution in muscle); Medway 1979 (Protein; bisalbuminemia in females); Medway & Geraci 1964 (Haematology), 1965 (Haematology; mineral; protein; blood chemistry of whole blood, plasma & serum; Na, Cl, albumin, α_1-, α_2- & β-globulins & BUN), 1972a (Haematology; leukocyte distribution in blood capillaries & large vessels), 1972b (Carbohydrate & energetics; distribution of glucose); Medway et al. 1970a (Endocrinology; haematology; hematologic response to corticosteroids (Dexamethasone); eosinophil count; plasma cortisol levels; lymphopemia; neutrophilia), 1970b (Anaesthesia; enzyme; protein; effect of halothane anaesthesia on serum glutamic oxaloacetic transaminase, ornithine carbamyl transferase, alkaline phosphatase & lactic dehydrogenase activities & bilirubin & total protein levels); Mermoz 1977 (Food; demersal fish; mouth of La Plata River, Argentina); Murchison 1980 (Biological sonar; detection range & range resolution of echolocating); Myhre et al. 1969 (Haematology; taxonomy & evolution; blood groups), 1971 (Taxonomy & evolution; haematology; blood groups); Nachtigall 1975 (Nutrition; food deprivation & work rate); Nagel et al. 1964 (Anaesthesia), 1965 (Anaesthesia; addendum); Nelson 1971 (Haematology; lipid; lipid composition of blood, plasma & erythrocytes; phospholipids (PS, PC, SPH) & glucosphingolipids), 1973 (Haematology; lipid; fatty acid composition of plasma & erythrocytes; iso & multiple-branched fatty acids); Odell 1979 (Mineral; toxic compounds; chlorinated hydrocarbons & trace metals); O'Shea et al. 1980 (Toxic compounds; DDE, p,p^1-DDT, P,p^1-DDE & PCB in blubber, brain & muscle; Pacific & S. Atlantic oceans, November 1968 to June 1976); Pilleri 1982 (Biological sonar; sense of vision & sonar field), 1983 (Biological sonar; sonar system); Provancha et al. 1982 (Special topic; capture, marking & resighting of free-ranging; Indian River lagoon, Florida); Puppione & Nichols 1970 (Haematology; lipid; protein; characterization of chemical & physical properties of serum lipoproteins); Reijnders & Wolff 1981 (Special topic; life history, population dynamics & disease); Ridgway 1968 (Care; special topic; biomedical experimentation); Ridgway et al. 1968 (Enzyme; haematology; chemical & physical characteristics of blood; eosinophil; leukocytes; serum glutamic oxaloacetate transaminase, BUN, Ca, Cl, K & cholesterol), 1969 (Diving; carbohydrate & energetics; respiration & deep diving); Saiki & Mori 1952 (Lipid; properties of oils from various body parts); Saito et al. 1974 (Haematology; Fletcher factor activity in plasma); Sawyer-Steffan & Kirby 1980 (Endocrinology; reproduction; serum steroid hormone (progesterone; estrogen) levels in captive females; correlation with reproductive status & their application to ovulation induction); Sawyer-Steffans et al. 1983 (Endocrinology; reproduction; progesterone & estrogens in pregnant & non-pregnant & effects of induced ovulation); Sergeant 1982 (Special topic; mass stranding); Sergeant et al. 1973 (Special topic; nutrition; reproduction; age, growth and maturity; N.E. Florida); Shapunov 1971 (Carbohydrate & energetics; food; food requirements & energy balance); Shaw 1971a (Carbohydrate & energetics; milk & lactation; vitamin; neutral carbohydrates (lactose; D-glucose; myo- and scyllo-inositol) in milk); Smith et al. 1983 (Toxic compounds; reaction to controlled oil spill); Sokolov & Rodionov 1978 (Enzyme; muscle succinate dehydrogenase; histological study); St. Aubin & Geraci 1980 (Vitamin; tissue levels of vitamin C); Sterling et al. 1975 (Endocrinology; thyroid hormones metabolism; T_3 & T_4 concentrations); Sweeney 1977 (Care; intratracheal injection of antibiotics); Varanasi et al. 1973 (Biological sonar; lipid; isomeric composition of diisovaleroyl glycerides; specificity for biosynthesis of diisovaleroyl glyceride); Varanasi & Malins 1974b (Biological sonar; lipid; distribution & metabolism of wax esters in putative acoustic tissues; formation of 1,3-diisovaleryl glyceride); Wedmid & Litchfield 1976 (Biological sonar; lipid; positional analyses of triglycerides using PMR with shift reagents); White 1970 (Nutrition; vitamin; thiaminase deficiency, raw fish diet); Williams 1981 (Lipid; nutrition; dietary deficiencies; 20:4ω6 in phospholipids (PC & PE) of liver & muscle; prostaglandins); Williams et al. 1977 (Food; lipid; taxonomy & evolution; fatty acid composition of tissues & food (herring) phospholipids; lipid composition closer to land animals); Williams 1968 (Carbohydrate & energetics; glycogen in epidermis); Würsig & Würsig 1977 (Special

topic; photographic determination of group composition & stability), 1979 (Special topic; behavior & ecology; S. Atlantic).

Tursiops tursio

Sleptsov 1961a (Food; crustacean, moluscs fish; Bering Sea).

Tursiops sp.

Duffield et al. 1983 (Haematology; hematologic differences of off-shore and in-shore forms of Tursiops); Lu & Yang 1980 (Lipid; comparative study on lipid components & properties; fatty acids, wax esters, iodine No. & unsaponifiable matter).

Odontoceti; Globicephalidae

Feresa attenuata Gray, 1871 (slender blackfish; slender pilot whale; pygmy killer whale)

Litchfield et al. 1975 (Biological sonar; lipid; comparative lipid patterns of acoustical & non-acoustical fatty tissues; blubber & jaw fat triglycerides & wax esters; echolocation mechanisms); Perrin & Hubbs 1969 (Special topic; observation tropical E. Pacific Ocean).

Globicephala macrorhyncha (Gray, 1846) (short-finned blackfish)

Gaskin et al. 1974 (Toxic compounds; Hg, dieldrin & PCB; St. Lucia, Lesser Antilles); Stoneburner 1978 (Toxic compounds; Se, Cd & Hg in liver, kidney & blubber; toxicosis); Thompson & Friedl 1982 (Biological sonar; special topic; long-term study of low frequency sounds off Oahu, Hawaii, seasonal migration & distribution).

Globicephala melaena (Traill, 1809) (pilot whale; Atlantic blackfish; calling whale)

Alzieu & Duguy 1979 (Toxic compounds; PCB, DDT, DDE & DDD in blubber, muscle, liver, kidney, stomach & in unborn); Arima & Nagakura 1979 (Toxic compounds; Hg & Se in muscle of fetal & adult); Birkby et al. 1982 (Lipid; glycolipids of keratinized tissue; epidermis); Blomberg 1972 (Lipid; biological sonar; head oil, lipid & analysis & ultrasonic structure), 1974 (Lipid; G.m. melaena; head oil hydrocarbons (pristane), wax esters, triglycerides, cholesterol, isovaleryl triglycerides & diglycerides); Blomberg & Lindholm 1976 (Biological sonar; lipid; variation of composition of lipids & sound velocity in melon; N. Atlantic); Blomberg 1978 (Biological sonar; lipid; functional aspects of head oil lipids); Brockerhoff 1966 (Lipid; fatty acid distribution patterns of animal depot fats); Brockerhoff & Hoyle 1963 (Lipid; positional distribution of fatty acids of blubber fats); Cowan 1966 (Special topic; pathology); Gallien et al. 1970 (Haematology; taxonomy & evolution; population studies; protein; immunoelectrophoresis; comparative study of serum proteins (21 constituents); transferrin); Garner et al. 1973 (Myoglobin); Hashimoto et al. 1967a (Haematology; lipid; nutrition; aliphatic wax alcohols & fatty acid of atheromata & arterial tissues; plasma lipids; lipoproteins, wax esters & sterol esters); Lesch 1969 (Lipid; development of neutral lipids & fatty acids in brain); Lesch et al. 1968 (Lipid; composition of neutral lipids & phospholipids & their fatty fatty acids of brain; cholesterol); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid pattern in the melon fats; isovalerate fats; triglycerides & long-chain wax esters); Lygonis 1966 (Lipid; product; dietary whale oil on serum cholesterol of man & rat); Medway & Moldavon 1966 (Haematology; blood studies); Mercer 1975 (Food; squid, Illex illecebrosus, Newfoundland); Nores & Perez 1982 (Special topic; mass stranding; Cantabrian Coast, N. Spain); Pilson 1970b (Special topic; tears); Raga et al. 1982 (Special topic; stranded on Spanish Mediterranean coast); Sergeant 1962a (Special topic; biology; Newfoundland waters), 1982 (Special topic; mass stranding); Sleptsov 1961a (Food; eat crustaceans, fish & molluscs; Bering Sea); St. Aubin & Geraci 1980 (Vitamin; vitamin C levels in adrenals, epidermis, muscle & blubber); Taruski et al. 1975 (Toxic compounds; DDT, chlordane, dieldren & PCB levels in blubber); Tsujimoto & Koyanagi 1973 (Lipid; distillation of head oil under vacuum); Wedmid & Litchfield 1976 (Lipid; biological sonar; positional analyses of triglyceride using PMR with shift reagents); Wedmid et al. 1972 (Lipid; biological sonar; heterogeneity of lipid composition within cephalic melon), 1973 (Biological sonar; lipid; heterogeneity of lipid composition within the cephalic melon; lipid classes & molecular species; fatty acid & fatty alcohol composition; wax esters & triglycerides contain valeric acid & long-chain fatty acids; acoustical function).

Globicephala scammoni (Cope, 1869) (Pacific pilot whale; blackfish)

Beal & Cardeilhac 1979 (Protein; ceruloplasmin); Border 1975 (Haematology; protein; electrophoretic analyses of hemoglobins); Hall et al. 1971 (Special topic; stranding San Clemente I.); Taruski et al. 1975 (Toxic compounds; DDT, dieldrin, chlordane, & PCB levels in blubber).

Globicephala spp.

Sergeant 1982 (Special topic; mass stranding).

Orincus orca (Linnaeus, 1785) (Atlantic killer whale)

Arvy & Pilleri 1983 (Special topic; reproduction; migration & reproduction); Baldridge 1972 (Food; eat gray whales); Barr & Barr 1921 (Food; eat Dall's porpoise); Betesheva 1961 (Food; eat squid & fish; Kurile I.); Border 1975 (Haematology; protein; electrophoretic analysis of hemoglobins); Castello 1977 (Food; sea birds, sea mammals, fish, squid, rays, shots & sharks); Castello et al. 1977 (Myoglobin); Cohen et al. 1983 (Haematology; differential lymphocytotoxicity of sera to human leukemic & normal lympho-

cytes); Cornell 1983 (Haematology; protein; enzyme; carbohydrates & energetics; hematology & clinical chemistry; serum LDH, urea, creatinine, glucose & hemoglobin concentrations); Dhindsa et al. 1974 (Carbohydrate & energetics; haematology; hemoglobin electrophoresis; respiratory function of blood); Goldsberry et al. 1976 (Special topic; live capture techniques); Hashimoto & Dayton 1964 (Lipid; nutrition; lipids from coronary & aortic atheromata); Hashimato et al. 1967a (Haematology; lipid; nutrition; aliphatic wax alcohols & fatty acids of atheromata & arterial tissues; plasma lipids, lipoproteins, fatty acids, wax esters & sterol esters); Huber et al. 1982 (Special topic; sightings in Gulf of Farallones, U.S.A., 1971-1979); Lenfant et al. 1968 (Carbohydrate & energetics; respiratory function); Malvin et al. 1971 (Endocrinology; antidiuretic hormone levels; plasma ADH concentration); Meuth 1982 (Myoglobin; sequence determination of major components); Meuth et al. 1981 (Myoglobin; taxonomy & evolution; phylogenetic relation of myoglobin); Nores & Perez 1982 (Special topic; mass stranding Cantabrian coasts of N. Spain); Palo 1972 (Special topic; natural history; Washington state, U.S.A.); Popov et al. 1976 (Product; food; amino acid composition of meat); Puppione et al. 1971 (Haematology; lipid; protein; serum lipoproteins classes & lipids; composition of VLDL, LDL & HDL; electrophoretic patterns); Rice 1968 (Food; stomach contents; feeding behavior; N.E. Pacific); Ridgway 1979 (Special topic; reported causes of death); Saito et al. 1974 (Haematology; Fletcher factor activity in plasmas of various spp.), 1976 (Haematology; Fitzgerald factor high molecular weight kininogen clotting activity in human plasma on health & disease of various animal plasma); Saito & Yokoyama 1954 (Endocrinology; Orcinus rectipenna; Langerhans' islets & extraction method); Sleptsov 1961a (Food; fish, crustaceans & molluscs; Bering sea), 1961c (Special topic; results on weighing large & small captured whales); Spencer et al. 1967 (Carbohydrate & energetics; respiration & cardiac activity); Steiner et al. 1979 (Food; special topic; vocalization & feeding behaviour); Taylor & Farrell 1973 (Haematology; light & electron microscopy of peripheral blood neutrophils affected by Chediak-Higashi syndrome); Watson & Gaskin 1983 (Special topic; ventilation cycle; Bay of Fundy); Wilson & Pitcher 1979 (Food; feeding & behaviour, Foyle estuary, Ireland).

Peponocephala electra (Gray, 1846) (many-toothed blackfish; finless porpoise)

Tsuyuki & Itoh 1969b (Lipid; fatty acid composition of oil; density, specific gravity, iodine No., unsaponifiable matter & acid No.).

Pseudorca crassidens (Owen, 1846) (false killer whale)

Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns in the melon fats; isovaleryl lipids, triglycerides & long-chain fatty acids); Nishiwaki & Tobayama 1982 (Special topic; a morphological study of fetal growth); Nores & Perez 1982 (Special topic; mass stranding; Cantabrian coast of N. Spain); Sergeant 1982 (Special topic; mass stranding); Wedmid & Litchfield 1976 (Biological sonar; lipid; positional analyses of triglyceride using PMR with shift reagents).

Odontoceti; Grampidae

Grampus griseus (G. Cuvier, 1812) (Risso's dolphin)

Aucamp et al. 1971 (Toxic compounds; DDT & dieldrin in liver & blubber); Braham 1983 (Special topic; northern records in N.E. Pacific); Gallien et al. 1970 (Haematology; taxonomy & evolution; protein; immunoelectrophoresis of serum proteins); Jones 1981 (Food; food habits; N. California); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns in melon fats; isovalerate lipid; long-chain wax esters); Raga et al. 1982 (Special topic; stranded on Spanish Mediterranean coast); Wedmid & Litchfield 1976 (Biological sonar; lipid; positional analysis of triglycerides using PMR with shift reagents).

Odontoceti; Kogiidae

Kogia breviceps (Blainville, 1838) (pigmy sperm whale; lesser cachalot)

Hale 1962 (Special topic; S. Australian coast); Jenness & Odell 1978 (Toxic compounds; milk & lactation; lipid; protein; lactose, fatty acids & protein content; electrophoresis of casein; DDT, dieldrin & PCB 1203 in milk); Karl et al. 1978 (Biological sonar; lipid; compositional topography of melon & spermaceti organ (fat-filled) lipids; implications in echolocation; wax ester & triglyceride composition (3 regions of melon)); Nagorsen & Stewart 1983 (Food; special topic; stomach content; Vancouver I.); Odell 1979 (Mineral; toxic compounds; chlorinated hydrocarbons & trace metals; ecology & population biology; S.E. Florida); Ross 1979 (Food; stomach contents; fish, Crustacea & cephalopods); St. Aubin & Geraci 1980 (Vitamin; vitamin C in adrenals, epidermus, muscle & blubber).

Kogia simus (Owen, 1866) (Owen's pigmy sperm whale)

Jones 1981 (Food; N. California); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns in melon fats; contains no isovalerate; triglycerides & wax esters; long-chain wax esters); Odell 1979 (Mineral; toxic compounds; chlorinated hydrocarbons & trace metals; ecology & population biology; S.E. Florida); Ross 1979 (Food; stomach contents, crustaceans, fish & cephalopods).

Odontoceti; Monodontidae

Delphinapterus leucas (Pallas, 1776) (beluga; white whale)

Addison & Brodie 1973 (Toxic compounds; DDT derivations in liver & muscle; McKenzie Delta); Arnason 1982 (Nucleic acid; DNA); Arnason et al. 1982 (Taxonomy & evolution; nucleic acid; DNA; balaenopterids); Braham et al. 1977 (Food; Bering, Chuckchi & Beaufort seas); Braham & Krogman 1977 (Special topic; population, biology; Bering, Chukchi & Beaufort seas); Brodie 1969 (Special topic; mandibular layering & age determination), 1971 (Nutrition; reproduction; aspects of growth, reproduction & behaviour; Cumberland Sound-Baffin I. populations); Brooks 1954a (Special topic; investigation), 1954b (Special topic; preliminary report on investigation, Bristol Bay), 1955 (Special topic; investigation), 1956 (Special topic; investigation), 1957 (Special topic; investigation); D'Angelo 1982 (Haematology; carbohydrate & energetics; protein, erythrocyte glucose transport; protein permeability); Degerbol & Nielsen 1930 (Special topic; biological observations & measurements of female & newborn); Denisov 1936 (Lipid; chemical composition of fat); Dhindsa et al. 1974 (Haematology; carbohydate & energetics; respiratory function of blood; hemoglobin electrophoresis); Doan & Douglas 1953 (Food; Churchill region, Hudson Bay); Douglas 1951 (Special topic; reproduction; investigations; Churchill, Hudson Bay); Fay 1978 (Special topic; general); Finley 1976 (Food; special topic; status of marine animals, central District of Franklin, N.W.T.); Finley et al. 1982 (Food; special topic; taxonomy & evolution; abundance, distribution, stock indentity, catch history & management; N. Quebec); Fraker et al. 1978 (Special topic; S. Beaufort Sea); Fraker 1979a (Special topic; spring migration; Beaufort Sea, Alaska), 1979b (Special topic; distribution & abundance & relationship to physical & chemical characteristics of MacKenzie estuary, Canada); Freeman 1968 (Special topic; winter observations in Jones Sound, N.W.T.); Geraci et al. 1969 (Carbohydrate & energetics; haematology; enzyme, mineral, protein; serum constituents; urea, creatinine, uric acid, Na, Cl, Ca, P, total protein, albumin, lactic acid, globulins, glutamic oxaloacetic transaminase & glutamic pyruvic transaminase), 1969a (Haematology; studies); Geraci & St. Aubin 1979 (Care; enzyme; diagnostic value of tissue enzymes; liver, muscle & plasma alanine aminotransferase, aspartate aminotransferase, sorbitol dehydrogenase; γ-glutamyl transferase, alkaline phosphatase & creatine kinase), Harms et al. 1977/78 (Toxic compounds; DDT, PCB, Cu, Tn, Cd, Pb & Hg in mineral, blubber, liver, brain & liver); Harrison & Hall 1978 (Special topic; Alaskan distribution); Hay & McClung 1976 (Special topic; observation, Canadian High Arctic); Hopkins & Chisholm 1954 (Lipid; 22:1 in blubber oil); Johnson 1979 (Special topic; fall westward migration along central Alaska Beaufort Sea coasts); Jonkel 1969a (Special topic); Kapel 1977 (Food; special topic; catch in Greenland, 1954-75); Kleinenberg et al. 1964 (Special topic; investigation); Klinkhart 1966 (Special topic; Alaska); Lauer & Baker 1969a (Lipid; milk & lactation; proximate composition; gross composition and fatty constitution of milk); Lensink 1961 (Special topic; status report); Litchfield et al. 1971 (Biological sonar; lipid; isovaleryl triglycerides in blubber & melon oils; echolocation role); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns of melon fat; isovalerate fat; triglycerides & wax esters containing long-chain fatty acids); Medvedev 1971 (Food; data on feeding; Dickson region); Mironova 1951 (Vitamin; vitamin A in fat); Pilleri 1982 (Biological sonar; sense of vision & sonar field), 1983 (Biological sonar; sonar system of dolphins); Saito et al. 1974 (Haematology; Fletcher factor activity in plasma of various spp.), 1976 (Haematology; Fitzgerald factor high molecular weight kininogen clotting activity in human plasmas in health & disease in various animal plasmas); Seaman & Burns 1981 (Special topic; studies in Alaskan waters); Seaman et al. 1982 (Food; W. Alaska; eat fish, shrimp & octopus); Sergeant 1962 (Special topic; biology; hunting; Canadian Arctic), 1969 (Food; feeding rates), 1973b (Special topic; biology; W. Hudson Bay); Sergeant & Brodie 1969a (Special topic; body size), 1969b (Special topic; tagging), 1975 (Special topic; identity, abundance & present states of populations, N. America); Sergeant & Hoek 1975 (Food; special topic; seasonal distribution in E. Beaufort Sea); Shochi et al. 1982 (Biological sonar; characteristic and directional properties of sonar signal emitted by captive); St. Aubin & Geraci 1977 (Protein; enzyme; activities & distribution in tissues & plasma; aspartate aminotransferase, alanine aminotransferase, ornithine carbamyl transferase & sorbitol dehydrogenase; spp. & tissues differences), 1980 (Vitamin; vitamin C levels in adrenals, epidermis, muscle & blubber); Tarasevich 1974 (Special topic; characteristics of migration towards coast); Vibe 1950 (Food; Thule district; N.W. Greenland); Vladykov 1944 (Special topic; hunting & biology; Gulf of St. Lawrence), 1946 (Food; St. Lawrence river); Vogl & Fisher 1982 (Haematology; special topic; arterial retia related to supply of the central nervous system; hemoglobin; myoglobin); Wedmid & Litchfield 1976 (Lipid; biological sonar; positional analysis of triglycerides using PMR with shift reagents).

Monodon monoceros Linnaeus, 1758 (narwhal; unicorn whale; monodon)

Bada et al. 1983 (Special topic; age determination by aspartic acid racemization); Best & Fisher 1974 (Reproduction; seasonal breeding); Degerbol & Freuchen 1935 (Food); Finley & Gibb 1982 (Food; summer diet; Pond Inlet, N. Baffin I.); Finley & Miller 1982 (Special topic; examination of harpoon gun technology, Pond Inlet, N. Baffin I.); Finley et al. 1980 (Special topic; aspects of hunt; E. Canadian Arctic); Hay & McClung 1976 (Special topic; observation, Canadian high Arctic); Howell 1930 (Lipid; subdermal oil reserves; myology); Kapel 1977 (Food; special topic; catch on Greenland 1954-75); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns of melon fats; isovalerate fats; triglycerides & long-chain wax esters); Litchfield et al. 1975 (Biological sonar; lipid;

comparative lipid patterns in acoustical & non-acoustical fatty tissues; blubber & jaw fat; triglycerides & wax esters; echolocation mechanisms); Mansfield 1964 (Special topic; present & future research); Mansfield et al. 1975 (Food; E. Canadian waters), 1975a (Special topic; E. Canadian waters); Merdsoy et al. 1979 (Special topic; occurrence at Hall's Bay, Newfoundland); Pilleri 1983 (Biological sonar; sonar system of dolphins); Pilleri et al. 1982a (Biological sonar; taxonomy & evolution; osteological consideration in shape of sonar field; melon); Robisch et al. 1972 (Biological sonar; lipid; differences in triacylglycerols from acoustic tissues & posterior cranial blubber); Silverman 1979 (Special topic; social organization & behaviour; Lancaster Sound, Pond Inlet & Tremblay Sound, N.W.T.); Vibe 1956 (Food; Thule district; N.W. Greenland); Vogl & Fisher 1982 (Haematology; myoglobin; special topic; arterial retia related to supply of the central nervous system; hemoglobin; myoglobin); Wagemann et al. 1983 (Toxic compounds; heavy metals in tissues & organs); Wedmid & Litchfield 1976 (Biological sonar; lipid; positional analysis of triglycerides using PMR with shift reagents).

Odontoceti; Phocoenidae

Neomeris phocoenoides

Tsuyuki & Itoh 1969a (Lipid; fatty acid composition of oil; oil content, specific gravity, acid No., iodine No. & unsaponifiable matter).

Neophocoena asiaeorientalis (finless black porpoise)

Pilleri & Gihr 1975 (Food; taxonomy & evolution; special topic; ecology).

Neophocoena sunamari

Pilleri & Gihr 1975 (Food; taxonomy & evolution; special topic; ecology).

Neophocoena phocoenoides (G. Cuvier, 1829) (finless black porpoise; Indian porpoise)

Arima & Nagakura 1979 (Toxic compounds; Hg & Se of adult & fetal Odontoceti); Itoh & Tsuyuki 1974a (Lipid; fatty acid composition of blubber (different areas) oil; iodine No., acid No. & unsaponifiable matter); Pilleri 1983 (Biological sonar; sonar systems); Pilleri & Gihr 1975 (Food; taxonomy & evolution); Pilleri et al. 1982b (Biological sonar; taxonomy & evolution; osteological consideration on shape of sonar field; melon); Shochi et al. 1982 (Biological sonar; characteristic and directional properties of sonar signal emitted by captive).

Phocoena phocoena (Linnaeus, 1758) (harbor porpoise; common porpoise)

Amundin & Andersen 1983 (Biological sonar; sound production regulation); Andersen 1966 (Haematology; physiological range of elements formed in the blood), 1968 (Haematology; physiological ranges of chemical parameters in captive porpoises); Andersen & Nielsen 1983 (Water; exchange of water between animal & environment); Arnason 1968 (Nucleic acid; DNA); Arnason et al. 1982 (Taxonomy & evolution; nucleic acid; DNA; monophylogenic origin); Arnold 1972 (Special topic; predation by whale shark); Blessing 1972 (Myoglobin; myoglobin concentration); Bock et al. 1968 (Milk & lactation; protein; amino acid composition of milk); Busnel & Dziedzic 1966 (Biological sonar; book; experimental metrological results of echolocation & compare with others); Clausen et al. 1974 (Toxic compounds; lindane, heptachlor epoxide, aldrin, PCB & DDE in adipose); Duinker & Hillebrand 1979 (Toxic compounds; transplacental transfer of PCB, DDT & dieldrin from maternal to fetal porpoise; mobilization of pesticides from lipid during pregnancy), 1979a (Lipids; toxic compounds; transplacental transfer of organochlorines from female tissue to unborn); Falconer et al. 1983 (Mineral; toxic compounds; Hg, Cd, Cu & Zn in liver & kidney); Gaskin et al. 1962 (Toxic compounds; Hg; Bay of Fundy region), 1975 (Special topic; preliminary movements study using radiotelemetry; Bay of Fundy), 1979 (Toxic compounds; changes in Hg of levels in adult muscle, cerebrum, cereballum, kidney, liver & mammary glands; Bay of Fundy & adjacent areas, 1969-1977); Geraci & St. Aubin 1979 (Care; enzyme; protein; diagnostic value of tissue enzymes; liver, muscle & plasma alanine aminotransferase, aspartate aminotransferase, sorbitol dehydrogenase, γ-glutamyl transferase, alkaline phosphatase & creatine kinase); Harms et al. 1977/78 (Toxic compounds; PCB, DDT, Cu, Zn, Cd, Pb & Hg in muscle, blubber, brain & liver in adults); Hedges et al. 1979 (Special topic; renicular morphology & renal vascular system); Huber et al. 1982 (Special topic; sightings in Gulf of Farallones, California, 1971-1979); Jones 1981 (Food; N. California); Kapel 1977 (Special topic; catch in Greenland 1954-1975 by year, month & region); Koeman et al. 1973b (Toxic compounds; Hg-Se correlations); Kuznetsov 1979 (Special topic; chemoreception of various substances); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns in melon fats; isovalerate wax esters & triglycerides; long-chain wax esters); Meuth 1982 (Myoglobin; sequence determination of major components); Neave & Wright 1968 (Special topic; seasonal migration, Bay of Fundy); Rae 1973a (Food); Reijnders & Wolff 1981 (Special topic; life history; population dynamics & disease); Sergeant 1982 (Special topic; mass stranding); Shochi et al. 1982 (Biological sonar; characteristics and directional properties of sonar signal emitted by captive); Sleptsov 1961a (Food; eat crustaceans, molluscs & fish; Bering Sea); Smith 1971 (Food; diet; stomach contents); Smith & Gaskin 1974 (Food; diet; coastal waters of E. Canada, especially Bay of Fundy), 1983 (Special topic; food; environment index for habitat use by females with calves near Deer I., Bay of Fundy); Spotte et al. 1978 (Care; beach-stranded); St. Aubin & Geraci 1980 (Vitamin; vitamin C in adrenals, epidermis, muscle & liver); Varanasi & Malins 1969 (Biological sonar; lipid; diol lipids;

dialkoxypentanes in jaw oil; acoustic dialkylethers), 1970b (Biological sonar; lipid; ester- & ether-linked lipids in the mandibular oil; isovaleric acid in glycerolipids; isopentadecanoic acid in neutral lipids); Voronov 1982 (Biological sonar; frequency temporal analysis of ultrasonic calls); Voronov & Stosman 1982 (Biological sonar; sound perception); Watson & Gaskin 1983 (Special topic; ventilation cycle; Bay of Fundy); Wedmid & Litchfield 1976 (Biological sonar; lipid; positional analyses of triglycerides using PMR with shift reagents).

Phocoenoides dalli (True, 1885) (Dall porpoise)

Fiscus et al. 1980 (Food; off California & Washington); Garner et al. 1973 (Myoglobin; determination of α-amino acid pK); Horvath et al. 1968 (Haematology; taxonomy & evolution; respiratory & electrophoretic characteristics of hemoglobins); Huber et al. 1982 (Special topic; sightings in Gulf of Farallones, California, 1971-1979); Jones 1981 (Food; N. California); Kajimura et al. 1981 (Food; off California & Washington); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns in the melon fats; isovalerate wax esters & triglycerides; long-chain wax esters); Meuth 1982 (Myoglobin; sequence determination of major components); Morejohn 1973 (Special topic; natural history); Nakamura & Tsujino 1952 (Lipid; fatty acid composition of mandibular, head & skin oil; density, iodine No., saponfication No. & unsaponifiable matter); Ridgway et al. 1968 (Enzyme; haematology; lipid; mineral; protein; chemical & physical properties of blood; corpuscle volume; eosinophil & leukocyte counts; serum Na, Cl, K, cholesterol, BUN & glutamic oxaloacetate transaminase); Sterling et al. 1975 (Endocrinology; thyroid hormone metabolism; T_3 & T_4 concentrations); Takaoka & Tsujino 1952 (Lipids; properties of body oils & their volatile fatty acids); Wedmid & Litchfield 1976 (Biological sonar; lipid; positional analysis of triglycerides using PMR with shift reagents).

Odontoceti; Platanistidae

Inia geoffrensis (Blainville, 1817) (Amazon River dolphin; pink porpoise)

Ackman et al. 1971a (Biological sonar; lipid; composition of wax esters, triglycerides & diacylglyceryl ethers in jaw & blubber fats); De Monte & Pilleri 1972 (Haematology; mineral; hematological plasmic & urinary values); Garman et al. 1983 (Special topic; molting; cutaneous gout); Johnson 1982 (Special topic; food; sharing); Litchfield et al. 1971a (Lipid; biological sonar; comparative lipid patterns); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns in melon fats; contains no isovalerate wax esters & triglycerides), 1979 (Biological sonar; lipid; compositional topography of melon lipids; wax esters & triglycerides; refractive collimation of echolocation sound beam); Penner & Murchison 1970 (Biological sonar; experimental demonstrated echolocation); Pilleri 1983 (Biological sonar; sonar system).

Lipotes vexillifer Miller, 1918 (baiji, Chinese Lake dolphin; Chinese River dolphin; white flag dolphin; peic'hi)

Lu & Yang 1980 (Lipid; melon oil iodine No., unsaponifiable matter, fatty acids & wax esters); Pilleri 1983 (Biological sonar; sonar system).

Platanista gangetica (Lebeck, 1801) (Ganges River dolphin, Ganges susu; blind dolphin; gangetic dolphin)

De Monte & Pilleri 1972 (Haematology; mineral; hematological plasmic & urinary values); Haque et al. 1977 (Food; observation on behavior & other biological aspects; eat fish); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns in the melon fats; contains no isovalerate triglycerides & wax esters); Pathak et al. 1956 (Lipid; component fatty acids of blubber & liver fat); Tsuyuki & Itoh 1971 (Lipid; fatty acid components of oil), 1972 (Lipid; fatty acid composition of oils from various blubber parts), 1973 (Lipid; fatty acid component of blubber).

Platanista indi

Arnason et al. 1977 (Nucleic acid; DNA), 1982 (Taxonomy & evolution; nucleic acid; DNA; monophylogenic origin); De Monte & Pilleri 1972 (Haematology; mineral; hematological plasmic & urinary values); Grillo & Sisini 1976 (Enzyme; nucleic acid; protein; urea cycle enzymes; liver carbamyl phosphate synthase, arginase, AMP deaminase, glutamic oxaloacetic transaminase, glutamate dehydrogenase & ornithine transaminase); Pilleri 1983 (Biological sonar; sonar system).

Platanista minor

Butt 1972 (Food; eat crustaceans, Palaemon carcinus, P. malcolmsonii, and fish, Glossogobius giurus; River Indus Dera Ismail Khan, Pakistan).

Pontoporia blainvillei (Gervais, 1844) (La Plata River dolphin; Franciscana)

Fitch & Brownell 1971 (Food; food habits; South America); Pilleri 1983 (Biological sonar; sonar system); Pilleri et al. 1982b (Biological sonar; sonar emmission field with osteological remarks on the pterygoid region).

Odontoceti; Physeteridae

Physeter catodon Linnaeus, 1758 (sperm whale; cachalot)

André & Francois 1926 (Lipid; head, muscle & spermaceti glycerol & fatty acid content); Arnason et al. 1977 (Nucleic acid; DNA); Arnason et al. 1982 (Taxonomy & evolution; nucleic acid; DNA; monophylogenic origin); Baltes 1968 (Products; composition of meat extract; water, PO_4,

total N & amino acids); Best 1969 (Special topic; distribution & movement W. coast of South Africa); Betesheva 1961 (Food; Kurile region; squid, octopus & fish), 1962 (Food; stomach contents); Betesheva & Akimushkin 1955 (Food; stomach contents; molluscs & fish); Bolognesi et al. 1982 (Myoglobin; reactivity of myoglobins toward imidazole, x-ray & binding study); Borisov 1969b (Haematology; protein; antigenic properties of serum proteins), 1981a (Myoglobin; taxonomy & evolution; haematology; protein; electrophoretic analyses of myoglobins & hemoglobins); Braekkan 1948 (Vitamin; vitamins A & D, riboflavin & thiamine in liver, blubber areas & tongue); Budantseva 1980 (Product; lipid; haematology; spermaceti oil on rat enzymes; alanine aminotransferase, alkaline phosphatase & bilirubin); Challinor et al. 1969 (Lipid; head oil; hydrocarbon, wax ester, triglycerides & fatty acids; wax esters with C_{25}-C_{38} chains); Chen 1967 (Myoglobin; amino acids); Crumpton 1967 (Myoglobin; antigenic site of myoglobin); Cushing et al. 1963 (Taxonomy & evolution; haematology; JU blood-typing system & specific soluble substances); Egorova 1964 (Product; vitamin; vitamin A & kitol content changes in liver during storage), 1968 (Product; vitamin; vitamin A level change during liver preservation with γ-irradiation); Frederickhsen 1977 (Food; eat rockfish; stomach contents); Fujii & Okura 1956a (Lipid; product; nutritive value of oil; causes seborrhea); Fujii & Matsumoto 1957 (Lipid; purification of wax from oil with lipase); Gambell 1970 (Special topic; weight of whale & its parts); Garner et al. 1973 (Myoglobin; determination of α-amino acid pK); Gilbert et al. 1982 (Nucleic acid; protein; pancreatic RNAase A); Grynberg & Szczepanska 1965 (Lipid; head oil fatty acid & fatty alcohol composition); Gutman et al. 1982 (Myoglobin); Hamilton et al. 1972 (Lipid; head oil alkanes & alcohols); Hansen & Cheah 1969 (Lipid; related dietary & tissue lipids; triglycerides, wax ester & fatty alcohol in head, blubber & stomach contents); Hapner et al. 1968 (Myoglobins; comparison of seal, porpoise & whale); Harris & Milne 1981 (Protein; balenine (β-methyl-N-methyl histidine, carnosine & anserine); Hasinoff & Christi 1982 (Myoglobin); Henry & Best 1983 (Toxic compounds; organochlorine residues in landed whales, Durban, South Africa; DDT, dieldrin, PCB in blubber); Idyll 1958 (Special topic; ambergris produced in intestine); Igarashi & Zama 1965 (Lipid; brain lecithin & their fatty acids); Ishihara 1960 (Enzyme; protein; stomach mucosa pepsin); Ishikawa 1949 (Enzyme; protein; proteolytic enzyme activity in pancreas); Itabashi & Takagi 1980 (Lipid; GLC separation of diacylglycerols & monoacylglycerols according to number of double bonds & positional placement of acyl groups); Kawauchi et al. 1978 (Endocrinology; isolation & primary structure of adrenocorticotropin; ACTH isolation from pituitary gland); Kenery et al. 1983 (Myoglobin; NMR study of amino acids & protein chain mobility in crystalline amino acids & myoglobins); Khristova & Atanasov 1982 (Myoglobin; oxymyoglobin oxidation in presence of Zn & Au ions); Kolchev & Marieva 1953 (Lipid; product; lipid, total solids & moisture of blubber; rendering of blubber); Lee & Oldfield 1982 (Myoglobin; structure of heme); Litchfield et al. 1975 (Biological sonar; lipid; comparative lipid patterns in acoustical & nonacoustical fatty tissues; echolocation mechanisms); Lockyer 1975 (Food; nutrition; estimates of growth & energy budgets); Ludoweig et al. 1972 (Carbohydrate & energetics; polysaccharides of nucleus pulposus during fetal development & aging); Matsumoto 1980 (Enzyme; protein; ATPase activating substances in dentrifice); Mednikov & Shubina 1976 (Taxonomy & evolution; nucleic acid; role of transcription promoter sites in microevolutionary processes); Mori et al. 1964 (Lipid; fatty acid & alcohol composition of oil); Morris 1973 (Lipid; wax & triglycerides content & fatty acid composition of spermaceti organ); Morris 1975 (Biological sonar; lipid; special topic; lipid content & fatty acid composition of spermaceti organ in calf, adults; buoyancy regulations; acoustic lens); Mrochkov 1951 (Vitamin; vitamin A content in liver); Mrochkov & Kiselev 1972 (Product; proximate composition; body parts; Antarctic); Nigen & Gurd 1973 (Myoglobin; comparison of carboxymethylated patterns of myoglobins); Norris & Harvey 1972 (Biological sonar; special topic; theory for function of spermaceti organ); Ohi et al. 1980 (Product; toxic compounds; CH_3Hg; relationship of Hg & Se in rat organs; marine meat protects against CH_3Hg neurotoxicity); Okura & Goto 1957 (Lipid; properties of blubber oil; iodine No., saponfication No. & unsaponifiable matter; Japan); Okutani & Nernoto 1964 (Food; squid; Bering Sea & Alaskan Gulf); Omura 1950 (Special topic; body weights; Japan); Pascal & Ackman 1975 (Lipid; occurrence of 7-methyl-7-hexadecenoic acid, the corresponding alcohol, 7-methyl-6-hexadecenoic acid & 5-methyl-4-hexadecenoic acid; N. & S. hemisphere); Pedersen 1952a (Lipid; milk & lactation; milk composition; fat, water, dry matter & no sugar; iodine No., saponification No., unsaponifiable matter & free fatty acid), 1952b (Lipid; oil & moisture content of meat), 1952c (Lipid; milk & lactation; lipid content of milk; iodine No., unsaponifiable matter, acid No. & water content); Pike 1950 (Food; crustacean, squid & fish); Poncz & Dearborn 1983 (Myoglobin; resistance to tryptic hydrolysis of peptide bond adjacent to N-epsilon-N-dimethyllysyl residues); Rice 1972 (Food; stomach contents; giant seadevil, Ceratias holbolli); Roe 1969 (Food; food & feeding habits; W. coast of Iceland); Ros de Ursinos et al. 1953 (Lipid; separation of components by urea complexes); Rouzet 1969 (Lipid; identification & determination of unsaponifiable matter, lanolins, squalene, carotenoids, hydrocarbons & sterols); Ruzic et al. 1982 (Myoglobins); Saito & Yokoyama 1954 (Endocrinology; insulin interaction from Langerhans' islets); Sano 1967a (Lipid; identification of 4,8,12-trimethyltridecanoic acid in oil); Schmidt 1950 (Vitamin; vitamin A in liver oil, British Columbia); Senda 1953 (Lipid; constituents of sperm oil); Sergeant 1982 (Special topic; mass stranding); Shibata 1951 (Protein; product; nitrogen compounds in meat); Shoubridge et al. 1976 (Carbohydrate & energetics; diving; enzyme; taxonomy & evolution; lactate dehydrogenase

isozymes in brain & muscle & in anoxia in diving); Sleet et al. 1981 (Haematology; special topic; estimate of total blood volume & total body weight); Sleptsov 1961c (Special topic; results of weighing large & small cetaceans); Sono & Dawson 1982 (Myoglobin); Suyama et al. 1977 (Lipid; protein; balenine, free amino acids, peptide & imidazole), Tagaki & Itabashi 1977 (Lipid; random composition of acyl & alcoholic group of wax esters of head oils); Takaoka et al. 1953 (Endocrinology; insulin); Tarasevitch 1968 (Food; squid, octopus & 5 spp. of fish; N. Pacific); Tower & Young 1973 (Carbohydrate & energetics; enzyme; mineral; intraspecies correlations of cerebral cortical oxygen consumption, acetylcholinesterase activity & chloride content); Travis et al. 1971 (Haematology; protein; electrophoresis of hemoglobin (6 bands) & haptoglobin); Watanabe & Suzuki 1950a (Proximate composition; product; various body parts); Wolman & Wilson 1970 (Toxic compounds; DDT & dieldrin in brain, liver & blubber); Yasugi et al. 1982 (Lipid; 2-O-acyl galactosyl ceramide in brain; 4 glycolipids); Zama & Igarashi 1956 (Lipid; brain cephalins (PE) & phosphatidyl inositol; fatty acids); Zama 1963 (Lipid; heart and brain phospholipids & fatty acid composition).

Physeter macrocephalus

Aguilar 1983 (Toxic compounds; food; food intake; DDD, DDT & PCB in blubber; N. Atlantic temperate waters); André & Maille 1947 (Lipid; head & spermaceti oil; saponification No.); Arvy & Pilleri 1983 (Special topic; reproduction; migration & reproduction); Best 1978 (Special topic; social organization); Borisov 1981b (Enzyme; protein; electrophoretic spectra of proteins from blood plasma, corpus luteum, corpus albicans & testes; lactate dehydrogenase); Clarke 1978a (Special topic; lipid; structure & proportions of spermaceti organ), 1978b (Lipid; physical properties of spermaceti oil), 1978c (Special topic; buoyancy control as a function of spermaceti organ), 1980 (Food; stomach contents; Cephalopoda diet & their bearing on biology; S. hemisphere); Clarke & MacLeod 1974 (Food; stomach contents; cephalopods; Vigo, Spain), 1981 (Food; stomach contents; cephalopods; Tasman Sea); Clarke et al. 1978 (Food; special topic; eat squid; marking off coast of Chile in 1964); Hansen & Cheah 1969 (Lipid; lipid & fatty acid composition; triglycerides, wax esters & fatty alcohols in head cavity, blubber & stomach contents (squid)); Harltes & Leaver 1955 (Nucleic acid; cementum thymine; dentine pyrimidines & basic pyrimidines); Hashimoto et al. 1967 (Haematology; lipid; nutrition, aliphatic wax alcohols & other lipids of atheromata & arterial tissues), 1967a (Haematology; lipid; nutrition; aliphatic wax alcohols & other lipids in atheromata & arterial tissues); Kawakami 1980 (Food; bibliography; review of food); Keil & Boerma 1964 (Mineral; F content in dentin & cementum); Kovacs 1961 (Lipid; head, body & muscle oil; density; saponification No., iodine No., unsaponifiable matter & fatty acid composition); Mori et al. 1965b (Lipid; composition of lipids in head cavity, blubber & meat; wax & glyceride content; fatty acid & fatty alcohol composition); Okura & Taguchi 1957 (Lipid; oil content of blubber); Raga et al. 1982 (Special topic; stranded on Spanish Mediterranean coast); Thompson & Friedl 1982 (Biological sonar; special topic; long-term study of low-frequency sounds, Oahu, Hawaii; seasonal migration & distribution); Wellendorf 1963 (Lipid; composition of spermaceti); Yamada 1946 (Lipid; proximate composition; distribution of fat in the corium layer).

Physeter spp.

Akiya et al. 1950 (Lipid; product; nutritive value of fatty acid ethyl esters of spermaceti oil); Andres 1972 (Myoglobin; myoglobin conformation & immunochemistry); Atassi 1967 (Myoglobin; immunochemistry of myoglobins, modified by porphyrins & metalloporphyrin); Atassi et al. 1981 (Myoglobins; immune response to myoglobin; genetic control; antigenic sites), 1983 (Myoglobin; production of monoclonal antibodies with preselected submolecular specificities to the 5 antigenic sites); Ballschmiter & Zell 1980 (Toxic compounds; DDT & metabolites; polychlorocamphenes, heptachlor epoxide & hexachlorobenzene); Berkower et al. 1982 (Myoglobin; possible immunodominant epitope recognized by murine T lymphocytes immune to different myoglobins); Berzin 1972 (Special topic; general book); Berzofsky et al. 1982 (Myoglobin; topographic antigenic determinants recognized by monoclonal antibodies to myoglobins); Blum et al. 1983 (Myoglobin); Brachi 1953 (Lipid; vitamin; carotene, vitamin A & anhydrovitamin A in oil); Bradshaw et al. 1969a (Myoglobin; isolation & characterization of tryptic peptides of myoglobin), 1969b (Myoglobin; isolation & characterization of tryptic peptides of myoglobin); Bradshaw & Gurd 1969 (Myoglobin; amino acid sequence); Brown et al. 1983 (Myoglobin), 1983a (Myoglobin); Budantseva 1973 (Lipid; product; whale oil preparation on regeneration of chronic gastric ulcers in rats), 1980 (Haematology; lipid; product; spermaceti oil on variations in activity of alanine aminotransferase & alkaline phosphatase & bilirubin content); Bukin & Skorobogatova 1951 (Product; vitamin; liver as source of vitamin A); Bulatov et al. 1980 (Endocrinology; somatotropin; hydrophobic peptide with growth activity from trypsin hydrolysates); Bulatov & Sadovnikova 1981 (Carbohydrate & energetics; endocrinology; somatotropin & its biologically active fragments in carbohydrate metabolism in rat diaphragmic muscle in vivo); Choon & Rodley 1983 (Myoglobin); Clarke et al. 1978 (Cetacea; special topic; observations & markings off coast of Chile in 1964); Colonna et al. 1978 (Taxonomy & evolution; protein; myoglobin; effect of evolution on homologous proteins); Croxall & Prince 1982 (Food; carbohydrate & energetics; calorific content of squid); Crumpton 1967 (Myoglobin; antigenic sites on myoglobins); Cushing et al. 1963 (Taxonomy & evolution; JU blood typing system and of specific soluble substances); Doster 1983 (Myoglobin; proteins; scaling & protein dynamics); Flanagan et al. 1983 (Myoglobin; single amino acid residues & stability of myoglobin); Fujii et al.

1954a (Lipid; blubber oil molecular distillation); Fujii & Matsumoto 1957 (Lipid; purification of wax by lipase); Fujii & Okura 1956a (Lipid; product; toxic substance in oil cause seborrhea); Fujii et al. 1957 (Lipid; separation of wax & glycerides & composition of other fatty acids); Fujino 1954 (Haematology; blood groups; serological constitution); Gambell 1970 (Special topic; weight of whale & its parts); Gilbert et al. 1982 (Nucleic acid; pancreatic RNAase); Goldanskii et al. 1982 (Myoglobin; structure); Gray et al. 1951b (Product; mineral; vitamin; B vitamins; S, P, Na, K, Ca, Mg, Fe, Al & Cl); Gurd et al. 1980 (Myoglobins; electrostatic stabilization in myoglobins); Hartzell et al. 1968a (Myoglobin; reactivity towards hydrogen & cupric ions); Hashimoto et al. 1967 (Lipid; wax, fatty acids & alcohols); Hashimoto & Mukai 1963 (Lipid; separation of alcohols & hydrocarbons by TLC), 1969 (Lipid; GLC separation of straight-chain saturated wax esters); Hasinoff & Pecht 1983 (Myoglobin); Hatano et al. 1967a (Lipid; spinal cord wax esters & glyceride fractionation), 1967b (Lipid; fatty acids & fatty alcohol composition of spinal cord wax & glycerides); Higashi et al. 1951 (Vitamin; vitamin A in oil); Hilditch & Lovern 1929 (Lipid; head & blubber oil; fatty alcohols); Hori et al. 1983 (Myoglobin); Infante et al. 1981 (Myoglobins); Iguchi 1953 (Lipid; product; industrial uses); Imaizumi et al. 1982 (Myoglobin; haematology; hemoglobin); Ishihara et al. 1958 (Endocrinology; structure of insulin & breakdown by pepsin); Ishikawa 1949 (Enzyme; protein; pancreatic proteolytic enzyme activity); Jamieson & Reid 1967 (Lipid; separation factors for identification of acetates, alcohols & hydrocarbons); Jue et al. 1983 (Myoglobin); Kabeno et al. 1971 (Endocrinology; glycoprotein fraction inhibits gastric juice secretions; gastrointestinal hormone); Kakinuma et al. 1950/51 (Lipid; product; carbohydrate & energetics; nutritional status of rats fed the oil; specific dynamic action); Kaufman & Shoeb 1961 (Lipid; composition of oil; 16:1); Kawakami 1976 (Food; stomach contents, squid; N.W. Pacific); Kawamura 1971 (Food; food content in stomach after chasing); Khristova & Atansov 1982 (Myoglobin; oxidation in presence of Zn & Au ions); Kinery et al. 1983 (Myoglobin; NMR study of amino acids & proteins side chain mobility in crystalline amino acids & myoglobins); Kuo & Weng 1975 (Lipid; temperature & frequency dependencies of ultrasonic velocity & absorption of oil); Kusakabe et al. 1962 (Protein; content of anserine carnosine, creatine & amino acids); Kolchev & Marieva (Product; technochemical composition of blubber & its changes during rendering); La mar et al. 1983 (Myoglobin); Lando et al. 1982 (Myoglobin; antigenic structure); Lando & Reichlin 1982 (Myoglobin; antigenic structure); Levit & Vasil'eva 1965 (Lipid; separation of fatty acids of fat & oil by centrifuging); Mims et al. 1983 (Myoglobin); Mori et al. 1966a (Lipid; fatty acid & fatty alcohol composition of oil), 1966b (Lipid; fatty acid & fatty alcohol composition of oil prepared in the laboratory & factory), 1966c (Lipid; fatty acid composition of waxes & glycerides of head & body oil), 1966d (Lipid; fatty acid & fatty alcohol composition of oil; contain branched C_{14} fatty acid), 1966e (Lipid; fatty acid & fatty alcohol composition of head cavity & suika oil); 1965a (Lipid; fatty acid composition of waxes & glycerides), 1966f (Lipid; fatty acid composition of waxes & glycerides of head & body oil); Mori et al. 1954 (Lipid; saponification of oil); Morishima & Hara 1983 (Myoglobin); Morris 1973 (Lipid; wax & triglyceride content & fatty acid composition of spermaceti organ); Mrochkov & Kiselev 1972 (Product; chemical composition of parts of body; Antarctic); Okura & Morii 1957 (Lipid; quality & properties of oil from head & body; iodine No., saponification No. & unsaponifiable matter; Japanese coast), 1957a (Lipid; quality & properties of oil; coastal Japan); Okura et al. 1957 (Lipid; composition of commercial alcohols), 1952a (Lipid; properties of oil; moisture, iodine No. & saponification No.); Okura & Nagata 1952 (Lipid; iodine value of unsaponifiable matter produced in a coastal factory); Okura et al. 1966a (Lipid; comparison of alcohol composition of adjacent body parts), 1966b (Lipid; fatty alcohol composition of head oil), 1966c (Lipid; fatty alcohol composition of blubber oil), 1966d (Lipid; fatty alcohol composition of head & body oils; N. Pacific), 1966e (Lipid; fatty alcohol composition of different individuals & body parts; oils from head, dorsal blubber, dorsal vertebra & large intestine); Okura & Nishimura 1957a (Lipid; properties of oil; iodine No. & saponification No.; seasonal variations; Antarctic), 1957b (Lipid; unsaponifiable matter of various body parts of animal; coast of Japan); Okura et al. 1966f (Lipid; fatty alcohol composition of head-sac & dorsal blubber oil; Antarctic); Ono & Toyama 1954 (Lipid; water; moisture content of fatty oils); Osawa et al. 1981 (Mineral; Ca & P of dentine); Poncz & Dearborn 1983 (Myoglobin; resistance of tryptic hydryolsis of peptide bond adjacent to N-epsilon-N-dimethyllysyl residues); Raie 1976 (Lipid; location of ethylenic bonds in fatty/alkane compounds); Rzhavskaya et al. 1977 (Lipid; oxidation of lipid during storage); Saiki & Mori 1953a (Lipid; fatty acid composition of head cavity; unsaponifiable matter, iodine No. & saponification No.), 1953b (Lipid; fatty acid composition of bone oil & large intestine oil; unsaponifiable matter, saponification No. & iodine No.), 1953e (Lipid; unsaponifiable matter content in various body parts), 1953f (Lipid; fat content of body parts of an unborn); Saito & Yokoyama 1954 (Endocrinology; Langerhans' islets & insulin extraction); Sano 1968 (Lipid; polyunsaturated fatty acids & alcohols in blubber oil); Sasano & Ota 1964 (Enzyme; protein; pancreatic proteolytic enzymes); Sasano & Yoshiwara 1965 (Enzyme; protein; use of pancreatic proteolytic enzymes); Sato & Tsuchiya 1977a (Lipid; oil cause of seborrhea in rats), 1977b (Lipid; waxes with different carbon atom chains cause seborrhea in rats); Schmitz et al. 1982 (Myoglobin), 1983 (Myoglobin), 1983a (Myoglobin; production of monoclonal antibodies to antigenic & nonantigenic proteins region using free synthetic peptides & immunoglobin), 1983b (Myoglobin), 1983c (Myoglobin); Shibata 1951 (Product; distribution of nitrogeneous compounds in toko-

meat); Simmerman et al. 1982 (Myoglobin; semi-synthesis); Singh & Gershbein 1969 (Lipid; fatty acid composition of oil); Solov'ev & Kolchanov 1982 (Myoglobin); Spencer 1979 (Lipid; alkoxy-acyl combination of wax esters of winterized oil by GLC-MS); Spencer & Kleiman 1978 (Product; spermaceti cream); Spencer & Tallent 1973 (Lipid; GLC-MS analysis of oil; triglycerides & wax esters, C_{42}-C_{58}); Srinivasan & Ravichandran 1982 (Myoglobin; structure); St. Aubin & Geraci 1980 (Vitamin; vitamin C in adrenals, epidermis, muscle & blubber); Streibl et al. 1971 (Lipid; composition of oil; wax ester separation); Sushko & Emelyanenko 1959 (Enzyme; protein; pancreatic tryptic activity); Suzuki & Shikama 1983 (Myoglobin); Takagi et al. 1976 (Lipid; GLC separation of wax esters of head oil by degree of unsaturation); Taruski et al. 1975 (Toxic compounds; DDT, chlordane, dieldrin & PCB levels in blubber); Tinyakov et al. 1975 (Milk & lactation; lipid; microstructure of milk; fat globules); Traylor et al. 1983 (Myoglobin); Tsuchiya & Kaneko 1951 (Lipid; pristane & hydrocarbons in liver unsaponifiable matter); Tsukahara & Yamamoto 1983 (Myoglobin); Twinning et al. 1981 (Myoglobin; antigenic sites); Ver Ploeg et al. 1971 (Myoglobin; mechanism & catalysis for addition of cyanide to myoglobins); Viglierchio & Gortz 1972 (Haematology; hemoglobin; parasites); Viswanadhan & Sundaram 1983 (Taxonomy & evolution; specificity of spatial clustering of amino acid residues as evolutionary trends in patterns); Wang et al. 1979 (Myoglobin; oxygen binding); Watanabe & Suzuki 1950a (Product; proximate composition; various body parts); Williams 1949 (Lipid; analysis of fatty oils with hydrocarbons); Yoshida et al. 1965 (Lipid; product; nutritive value of fatty acids in poultry; available energy, fatty acids & total digestible nutrients); Young & Atassi 1982 (Myoglobin; antibodies to myoglobin; antigenic sites), 1983 (Myoglobin), 1983a (Myoglobin), 1983b (Myoglobin); Young et al. 1983 (Myoglobin); Yukhov 1971 (Food; feeding in high latitudes of Antarctica).

Odontoceti; Ziphiidae

Berardius bairdi (Stejneger, 1883) (Baird's beaked whale; Pacific-beaked whale)

Betesheva 1961 (Food; cephalopods; Kurile region), 1962 (Food; stomach contents); Fujino 1954 (Haematology; serological constitution; blood groups); Litchfield & Greenberg 1974 (Biological sonar; lipid; taxonomy & evolution; comparative lipid patterns in melon fats; no isovalerate triglycerides & wax esters; long-chain wax esters); Litchfield et al. 1978 (Biological sonar; lipid; distinctive medium-chain wax esters, triglycerides & diacylglycerylethers in head fats, mandibular fat body, jaw, melon & dorsal blubber); Saiki 1953a (Lipid; fatty acid composition of blubber; iodine No., unsaponifiable matter, saponification No. & acid No.), 1953b (Lipid; fatty acid composition of visceral oil; iodine No.), 1954a (Lipid; proximate composition; vitamin; fatty acid composition of liver; acetone-soluble & acetone-insoluble lipids; vitamin A & B_{12} content in liver), 1954b (Lipid; vitamin; vitamin A in liver oil); Saiki et al. 1958 (Lipid; fatty alcohol composition of blubber oil); Sleptsov 1961c (Special topic; results of weighting small & large cetaceans).

Berardius sp.

Sleptsov 1961a (Food; eat crustaceans, fish & molluscs; Bering Sea).

Hyperoodon ampullatus (Forster, 1770) (bottle-nosed whale)

Arvy & Pilleri 1983 (Special topic; reproduction; migration & reproduction); Benjamin & Christiansen 1978 (Food; natural history); Clarke & Kristensen 1980 (Food; 8 genera of cephalopods); Harms et al. 1977/78 (Toxic compounds; PCB, DDT, Cu, Zn, Cd, Pb & Hg in muscle, blubber, brain & liver); Jangaard et al. 1963b (Lipid; fatty acid composition of blubber oil); Litchfield et al. 1975 (Biological sonar; lipid; comparative lipid patterns in acoustical & non-acoustical tissues, blubber fat; echolocation mechanisms; longer chain fatty acids in wax esters & triglycerides); Saiki & Mori 1952 (Lipid; properties of oils contained in various body parts), 1953c (Lipid; fatty acid composition of head & jaw oils; saponification No., iodine No., & unsaponifiable matter).

Hyperoodon planifrons (Flower, 1882) (southern bottle-nosed whale)

Arvy & Pilleri 1983 (Special topic; reproduction; migration & reproduction).

Hyperoodon rostratus

Mori et al. 1966a (Lipid; fatty acid & fatty alcohol composition of oil).

Mesoplodon bidens (Sowerby, 1804) (Sowerby's beaked whale)

André & Canal 1926 (Lipid); Lok & Folkersma 1979 (Biological sonar; lipid; composition of wax esters & triacylglcerols in melon & blubber fat in young animals; diet change from triglycerides in milk to wax esters in natural food).

Mesoplodon densirostris (Blainville, 1817) (Blainville's beaked whale)

Litchfield et al. 1975 (Biological sonar; lipid; comparative lipid patterns in acoustical & non-acoustical fatty tissues; longer chain fatty acids in wax ester & triglycerides; mechanism of echolocation).

Mesoplodon sp.

Sleptsov 1961a (Food; eat moluscs, fish & crustaceans; Bering Sea).

Ziphius cavirostris G. Cuvier, 1823 (goose-beaked whale; Cuvier's beaked whale)

Arnason et al. 1982 (Taxonomy & evolution; nucleic acid; DNA; monophylogenic origin); Baptist

1941 (Lipid; head & body oil; specific gravity, refractive index, saponification No. & iodine No.); Fordyce et al. 1979 (Nutrition; toxic compounds; heavy metals & atherosclerosis of stranded); Igarashi et al. 1953 (Lipid; head blubber oil; specific gravity, acid No., saponification No., unsaponifiable matter & total fatty acids); Knap & Jickells 1983 (Toxic compounds; DDT, PCB and trace metals); Lehman 1980 (Myoglobin; structure); Lehman et al. 1980 (Myoglobin; amino acid sequence); Litchfield et al. 1975 (Biological sonar; lipid; comparative lipid patterns in acoustical & nonacoustical fatty tissues; longer-chain fatty acids in wax esters & triglycerides; jaw & blubber oil); Raga et al. 1982 (Special topic; stranded on Spanish Mediterranean coast); Viale 1979 (Lipid; mineral; excretory function (salt excretion) and lipid synthesis of skin).

Ziphius sp.

Sleptsov 1961a (Food; eat crustaceans, molluscs & fish; Bering Sea).

PINNIPEDIA

Ackman & Eaton 1977 (Lipid; nutrition; pathological effect of docosenoic acid, heart); Ackman et al. 1967 (Lipid; linear, iso, anteiso and multiple-branched fatty acids; pristanic & phytanic acids), 1974 (Lipid; can food chain be detected with fatty acids from depots & organ fats of whales & seals?); Addison 1976 (Toxic compounds; distribution, transport & physiological significance); Aitken 1979 (Endocrinology; fur seal; luteal & uterine secretions; possible contraceptive attack); Akulin & Pervuninskaya 1972 (Lipid; fatty acid composition; Antarctic); Alzieu & Duguy 1979 (Toxic compounds; Phocidae; PCB, DDT, DDE and DDD in blubber, liver, kidney, stomach & in unborn); American Society of Mammologists, Committee on Marine Mammals 1967 (Special topic; standard measurement); Amoroso 1952 (Reproduction; placentation); Amoroso et al. 1965 (Reproduction, endocrinology; reproductive & endocrine organs of unborn, newborn & adults), 1951a (Reproduction; reproductive organs of near-term and newborn); Amoroso & Matthews 1952c (Milk & lactation; reproduction); Anbinder 1975 (Taxonomy & evolution; kariological similarity of sea lions & fur seals); Anonymous 1973 (Toxic compounds; PCB); Bada & Deems 1975 (Taxonomy & evolution; compare C-14 dating to aspartic acid racemization reaction); Bag et al. 1938 (Lipid; Phocidae; low grade blubber oil for preparation of high-grade fatty acids); Bartholomew 1970 (Taxonomy & evolution; model for evaluation of polygyny); Bartholomew & Boolootian 1960 (Taxonomy & evolution; numbers & population structure; California Channel I.); Bartlett & Moulder 1976 (Toxic compounds; bibliography; pesticide pollution); Bauer & Neth 1942 (Lipid; oil); Beamish 1970 (Biological sonar; vocalization; analytical model); Beare-Rogers et al. 1972 (Lipid; oils containing C_{22} fatty acids); Belkovitch 1964 (Molting; structure of cutaneous integuments); Bergman 1977 (Toxic compounds; synthesis of methanesulfonyl derivatives of p,p-DDE; Baltic sea); Bergmann et al. (Reproduction; toxic compounds; PCB in the Baltic); Bjornhag et al. 1979 (Carbohydrate & energetics; lipid; protein; proximate composition; milk & lactation; composition of milk (protein; lipid; lactose) correlates with postnatal growth rate); Blaxter 1961 (Milk & lactation; mineral; mammary gland & its secretion); Blix 1971 (Protein; diving; creatinine), 1976 (Diving; carbohydrates & energetics; metabolic aspects); Blix & Ronald 1979 (Reproduction; testicular temperature of Phocidae & Otariidae); Blix et al. 1973 (Diving; angiographic examination during diving), 1975 (Carbohydrate & energetics; enzyme; thermoregulation; differential effects of temperature on the activity of LDH of skin), 1975a (Carbohydrate & energetics; enzyme; brown adipose & its significance to venous plexuses), 1976 (Diving; myocardial blood flow); Blumenkrantz & Asboe-Hansen 1978 (Protein; hydroxyproline to hydroxylysine molar ratio indicates collagen type); Bonham 1941 (Food; stomach examination); Bodrov et al. 1958 (Care; technique & technology of treatment); Bonnell et al. 1978 (Special topic; general; S. California); Botelho & Gurd 1978 (Myoglobins; 2 spp.); Brain & Leith 1968a (Special topic; measurement of surfactants in lung), 1968b (Special topic; alveolar macrophages in lung); Breslow & Rumen 1967 (Myoglobins; reactivity of myoglobins to hydrogen ions); Brockerhoff et al. 1966b (Lipid; positional distribution of fatty acids in depot triglycerides); Brocklesby and Denstedt 1933 (Product; lipid; oils; British Columbia); Brodie 1981 (Nutrition; carbohydrates & energetics; energetics & behaviour in relation to undersea noise); Brooks & Forest 1971 (Care; metabolism of 3H-chloropromazine in 13 spp.); Brown 1975 (Toxic compounds; impact of Arctic gas & oil development); Brown et al. 1960 (Care; health problem in captive); Bryden 1969a (Nutrition; regulation of relative growth to functional demand); Buhler 1973 (Toxic compounds; Hg); Bunn et al. 1974 (Haematology; carbohydrate & energetics; 2,3-diphosphoylycerate indicating hemoglobin function of mammalian red cells); Burrell 1979 (Toxic compounds; heavy metal content; Bering Sea); Caldwell & Caldwell 1974 (Toxic compounds; studies in E. Gulf of Mexico); Canivenc & Bonnin-Laffarque 1973 (Endocrinology; fur seals; delayed implantation); Cappon & Smith 1981 (Toxic compounds; content & composition of Hg & Se in liver, brain meat and placenta); Carola 1957 (Lipid; chemical & physical properties of oil); Carter 1968 (Bibliography, 1900-1964), 1973 (Bibliography, 1965-1972); Case 1978 (Taxonomy & evolution; nutrition; evolution & adaptive significance of post-natal growth rates); Chapskii 1965b (Care; tests on examination & diagnosis of Phocidae subspp.); Chuba et al. 1970 (Haematology; Otariidae; B-like blood factor); Clements et al. 1970 (Taxonomy & evolution; special topic; Otariidae; surfactants & evolution of lungs); Conacher et al. 1972 (Lipid; isomers of monoenoic fatty acids in some partially hydrogenated oils); Cooke & Carter 1947 (Lipid; oil); Cornell 1975 (Care; nutrition; feeding of newborn); Corner 1975 (Toxic compounds; fossil fuel hydrocarbons); Damasco et al. 1976 (Endocrinology; biological effect of 18-hydroxycorticosterone); Dangerfield et al. 1976 (Lipid; nutrition; protein; atherosclerosis; lipoprotein electrophoresis); Davson & Graham 1974 (Special topic; comparative physio-

logy of eye); Davydov & Makarova 1965 (Thermoregulation; changes in heat regulation & circulation of newborn on transition to aquatic form of life); Dawe & Berard 1971 (Haematology; special topic; comparative pathology of hematopoietic & lymphoreticular neoplasms); Dean 1947b (Lipid; product; chemical & physical properties of oil); De Jong & Goodman 1982 (Taxonomy & evolution; protein; seal & sea lion; phylogeny studied by sequence analysis of eye lens proteins & alpha-crystallin); De Master 1979 (Reproduction; average age of first reproduction); Dogterom et al. 1980 (Endocrinology; presence of vasopressin, oxytocin and vasotocin in pineal gland, subcommissural organs & fetal pituitary gland); Donaldson & Foster 1939 (Product; seals used in chinook salmon feed); Dugal & Riou 1947a (Lipid; product; nutritive value of liver oil), 1947b (Product; nutritive value of liver); Duinker & Hellebrand 1979a (Toxic compounds; reproduction; lipid; transplacental transfer of organochlorine from female lipid tissue to unborn); Efremov 1977 (Vitamin; bibliography; review on vitamin A & D in fats); Engelhardt 1976 (Special topic; care; method for biopsy of tissue), 1977d (Molting; haematology; phocids; changes in physical and chemical characteristics of blood as related to molting), 1979 (Haematology; haematology & plasma chemistry of captive), 1979a (Endocrinology; functional roles of cortisol), 1983 (Thermoregulation; toxic compounds; bibliography; review; oil spill on thermoregulation, dermal toxicity, neurotoxicity & hemotoxicity); Evans 1971 (Special topic; orientation; behavior; radio telemetric studies); Fay et al. 1979 (Special topic; care; post-mortem procedures); Fisher & MacKenzie 1955 (Food; food habits; Maritimes, Canada); Flegal et al. 1981 (Toxic compounds; food; Hg in mussels); Florkin & Redfield 1931 (Haematology; sea lions respiratory function of blood); Fowler 1980 (Special topic; ecosystem models); Fredga 1976 (Taxonomy & evolution; chromosomes; taxonomy); Freeman & Horne 1973 (Toxic compounds; Hg; Canada); Galster 1971 (Toxic compounds; Hg; Alaska), 1976 (Toxic compounds; nutrition; Hg in Alaskan mothers & infants); Gaskin 1972 (Special topic; general book); Gelentyuk et al. 1972 (Haematology; some properties of blood); Genoways & Choate 1976 (Special topic; regulations pertaining to scientific specimens); Gentry 1973 (Thermoregulation; eared seals; thermoregulating behavior); George 1974 (Carbohydrate & energetics; structural & metabolic adaptations of muscles); Geraci 1973 (Anaesthesia; appraisal of immobilization by ketamine in wild & captive), 1975 (Nutrition), 1978 (Special topic; care; book, general; wild & in zoo), 1978a (Nutrition; care; nutrition & nutritional disorders); Geraci & St. Aubin 1979b (Special topic; stranding workshop), 1979c (Special topic; insights through strandings); Geraci & Sweeney 1978 (Care; clinical techniques); Geraci et al. 1981 (Anaethesis; safe method for repeated immobilization); Gill & Coues 1877 (Bibliography; N. America); Gold 1981 (Bibliography); Grav et al. 1974 (Thermoregulation; how do pups survive birth in Arctic winter?); Greenwood et al. 1974 (Molting; functional & pathological aspects of the skin); Guarino et al. 1975 (Protein; plasma protein binding & biliary excretion); Gulyas & Daniel 1969 (Nucleic acid; reproduction; protein; incorporation of labelled nucleic acid & protein; precursors by diapausing & nondiapausing blastocytes); Guttmann 1955 (Lipid; mineral; product; extracts & enzymic hydrolysates of liver); Hamilton 1949 (Special topic; weight, etc. of elephant seal); Hammond & Marshall 1952 (Reproduction; life cycle); Harris et al. 1983 (Lipid; nutrition; reduction of plasma lipids & lipoproteins; oil high in 20:5ω3 & 22:6ω3); Harrison 1963 (Reproduction; factors in delayed implantation), 1969a (Endocrinology; hypophysis; thyroid; adrenal); Harrison et al. 1968 (Special topic; behavior & physiology; book), 1952 (Reproduction); Harrison & Kooyman 1968 (Nutrition; reproduction; general physiology); Harrison & Tomlinson 1956 (Special topic; venous system observation); Hart & Fisher 1964 (Thermoregulation; Phocidae; Odobenidae; Otariidae; adaptation to polar environments); Haugen 1976 (Mineral; effect of CO_2 concentration on smooth muscle tension in brain arteries); Hayashida 1970 (Endocrinology; immunochemical investigation of pituitary growth hormones); Helminen et al. 1973 (Toxic compounds; PCB; Finland); Hempleman & Lockwood 1978 (Diving; thermoregulation; physiology); Henrickson et al. 1969 (Toxic compounds; Hg content); Heppleston & French 1972 (Toxic compounds; Hg & other metals; Britain); Herrera & Lehmann 1971 (Myoglobins; structure); Heu 1978 (Taxonomy & evolution; evolution of Odobenidae, Phocidae & Otariidae); Higashi et al. 1960 (Nutrition; vitamin; lipid; fatty acid composition of liver; vitamins A, B_1, B_2 and B_6 in liver of pregnant fur seals); Hissa 1980 (Thermoregulation; responses to cold); Hoel 1952 (Bibliography; Canadian, Newfoundland, Greenland & Russian sealing); Hofman 1975 (Bibliography); Hol et al. 1975 (Diving; selective redistribution of blood volume in diving); Holden 1981 (Toxic compounds; organochlorines; overview); Holtzmann 1969 (Toxic compounds; concentration of naturally occurring nuclitides Ra-226, Pb-210 & Po-210 in aquatic fauna); Howell 1922 (Food; habits in W. coast); Hubbard 1965 (Care; husbandry, housing & care), 1966 (Care; housing, husbandry & care), 1968 (Care; thermoregulation; husbandry & laboratory care), 1969b (Special topic; formation of study center); Hubbard & Poulter 1968 (Special topic; care; models for studies of comparative biology); Hunt 1968 (Toxic compounds; measurement of radioactivity in eyes); Hvolby 1974 (Lipid; expansion of solidifying fats); Hyland et al. 1977 (Toxic compounds; petroleum hydrocarbons); Ingram & Kendrew 1956 (Myoglobins; haematology; hemoglobins); Iablokov 1974 (Taxonomy & evolution; microevolution); International Council for the Exploration of the Sea (I.C.E.S.) 1974 (Bibliography), 1975 (Bibliography), 1978 (Bibliography), 1979 (Bibliography); Irving 1935b (Carbohydrate & energetics; respiration); Irving & Fisher 1935 (Water; problem of water supply); Irving et al. 1935c (Carbohydrate & energetics; respiratory metabolism), 1935d (Carbohydrate & energetics; haematology; respiratory characteristics of blood); Iversen & Krog 1973 (Thermoregulation; heat production & body surface area); Jansson et al. 1975 (Toxic compounds; PCB metabolites & p,p'-DDE in droppings); Jennings 1966 (Special topic; tagging program; Phocidae); Jensen & Jansson 1976 (Reproduction; toxic compounds; DDT and PCB metabolites; inhibition of

reproduction; Baltic Sea); Jensen & Jorgenson 1983 (Toxic compounds; polychlorinated terphenyls use, levels & biological effects); Jenson et al. 1979 (Reproduction; bibliography; toxic compounds; PCB & DDT on reproduction; number & identity of anthropogenic substances; Baltic Sea); Jessee 1968 (Nutrition; atherosclerosis); Johnson 1959 (Special topic; seal marking); Junquerira et al. 1973 (Enzymes; parotid & submandibular glands; digestive enzymes); Kaegi et al. 1980 (Toxic compounds; protein; mineral; metallothionein metal thiolate protein); Kandinskii 1970 (Haematology; blood groups; Antarctic); Keyes 1968 (Nutrition); Kharkov 1931 (Lipid; product; oil melting plant), 1973 (Haematology; dimensional characteristics of erythrocytes of blood); King 1964 (Special topic; book), 1983 (Special topic; book); Kingsley et al. 1982 (Special topic; distribution and abundance in high Arctic); Kishori & Guinn 1972 (Toxic compounds; baseline studies; Hg, Se & Zn in fur seal); Kizvetter 1953 (Lipid; oil); Klemm et al. 1976 (Enzyme; protein; amino acid sequence of pepsinogen); Klontz 1971 (Care; aquatic animal medicine); Koeman et al. 1972 (Toxic compounds; persistent chemicals); Kolchev & Chernomorski 1939 (Lipid; product; extraction of oil by the cold method); Kondrashev 1980 (Special topic; Soviet-American symposium on physiology & biochemistry); Kooyman et al. 1977 (Thermoregulation; thermal conductance of immersed pelts before & after oiling with Prudhoe Bay crude); Krylov & Medvedev 1971 (Food; observations of 13th Soviet Antarctic expedition); Kubota & Quanbunchan 1965 (Special topic; experimental studies in tooth development using EDTA-PB subcutaneous injections); Kuo & Weng 1975 (Lipid; temperature & frequencies dependencies of ultrasonic velocity & absorption of sperm & seal oil); Landis 1971 (Toxic compounds; spill harmless?); Landy 1980 (Special topic; bibliography; review on neoplasia); Lavigne 1982 (Thermoregulation; reproduction; special topic; effect of cold on breeding systems); Lavigne et al. 1977 (Special topic; functional aspects of vision), 1983 (Carbohydrates & energetics); Laws 1977 (Food; Euphausia superba); Leatherwood et al. 1976 (Special topic; N.W. Atlantic); Leeder & Bradbury 1971 (Special topic; discontinuous nature of epicuticle on the surface of keratin fibers); Legendre 1947 (Lipid; product; rendering of fat); Leith & Brown 1968 (Anaesthesia); Lenfant et al. 1970a (Carbohydrates & energetics; gas storage & O_2 capacity); Leonov & Shestakova 1962 (Lipid; products of oil oxidation); Lewis 1930 (Food; feeding habits; Victorian coast); Lewis & Wilson 1973 (Haematology; variations in ability to clump staphlococci); Ling 1969 (Food; bibliography; ecological factor affecting annual cycle in island populations); Litchfield 1973 (Lipid; taxonomy & evolution; taxonomic patterns in the triglyceride structure of fats); Lock & Solly 1976 (Toxic compounds; DDT in seal livers); Lockley 1958 (Special topic; marking); Lockwood 1976 (Toxic compounds; effect of pollutants); Lowell & Flanigan 1980 (Special topic; chemoreception); Lowry & Frost 1981 (Food; special topic; feeding & trophic relationship in E. Bering Sea); Lowry & Tinsley 1974 (Lipid; mineral; Otariidae; bromine levels in lipids); MacPherson & Penner 1967 (Special topic; freeze branding); Magniac 1929 (Food; salmon); Malvin et al. 1978 (Endocrinology; renin & aldosterone levels; regulation of salt balance); Mangold & Malins 1960 (Lipid; fractionation of lipids & wax esters on TLC); Mansfield 1980 (Toxic compounds; impact of oil production); Mansfield & Sergeant 1973 (Toxic compounds; indicators of pollution); Marine Mammal Biological Laboratory 1970 (Fur seals; nutrition; special study of pup nutrition); Matthews & Harrison 1949 (Reproduction; subsurface crypts, oogenesis & corpus luteum in ovaries); Mattson & Seeley 1974 (Special topic; thermoregulation; simple clinical temperature nutrition; special study of pup nutrition); Matthews & Harrison 1949 (Reproduction; subsurface crypts, oogenesis & corpus luteum in ovaries); Mattson & Seeley 1974 (Special topic; thermoregulation; simple clinical temperature telemetry system); Mawdesley-Thomas 1973 (Bibliography; pathology); McAlister & Sanger 1975 (Food; preliminary estimates of pinniped-finfish relationship in the Bering Sea); McDonald 1914 (Bibliography; Pribilof I.; Alaska); McDonell 1971 (Anaesthesia; physiological & pharmacological considerations); McGinnis 1975 (Thermoregulation; Phocidae; peripheral heat regulation); McGinnis et al. 1970 (Thermoregulation; peripheral heat dissipation); McHugh 1952 (Food; Otariidae; albatross); McLaren 1957 (Product; products of carcass, Arctic), 1962 (Special topic; population dynamics & exploitation, E. Canadian Arctic); Millard et al. 1980 (Special topic; coronary vasoconstriction, a model of vasospasm); Mohrindra & Downs 1966 (Toxic compounds; Cs-137 activity); Morshtyn 1963b (Lipid; product; oil production from fat); Murdaugh & Jackson 1962 (Carbohydrate & energetics; diving; heart rate & blood lactic acid concentration in experimental diving); Murdaugh et al. 1968 (Carbohydrate & energetics; haematology; APT-2,3-diphosphoglyceric acid ratios in erythrocytes); Murphy 1968 (Toxic compounds; enzymes; enzymic activity & pesticide residues in tissues); Murray 1899 (Special topic; branding & herding experiment); National Research Council 1978 (Toxic compounds; arsenic in Canadian environment); Naudet et al. 1977 (Nutrition; symposium on dietetics & nutritional aspects); Nauman 1971 (Myoglobin; structure; 6 spp.); Needham 1980 (Care; special topic; restraint & capture cage); Neff 1947 (Food; fur seal; stomach contents); Nevenzel 1970 (Lipid; review; occurrence, function & biosynthesis of wax esters; toothed whales; 30 spp.); Oritsland 1970a (Special topic; research in S.W. Atlantic pack ice, 1964), 1977 (Carbohydrates & energetics; model of energy balance); Osipova 1976a (Endocrinology; enzyme; phosphomonesterases of steroid-producing cells); Palumbo et al. 1971 (Special topic; haematology; seal lion; blood collection); Parks et al. 1973 (Enzyme; haematology; nucleic acid; purine metabolism of primitive erythrocytes; nucleic acid enzyme electrophoresis); Payne 1977 (Nutrition; fur seal; growth of population); Perks & Vizsolyi 1973 (Endocrinology; neurohypophysis of unborn), 1974 (Endocrinology; protein; neurohypophyseal peptides during fetal life); Pierotti 1980 (Reproduction; thermoregulation; taxonomy & evolution; effects of cold climate on evolution of breeding systems of Phocidae & Otariidae); Pilson 1965 (Milk & lactation; absence of lactose in milk of Otariidea); Popov 1971 (Milk & lactation; causes & dimension of natural mortality of young during

lactation period); Portmann 1975 (Toxic compounds; bioaccumulation & effect of organochlorines); Poulter 1965a (Special topic; equation for determination of weight of seal or sea lion from girth & length measurements), 1969 (Biological sonar; conditioning of animals for echolocation abilities); Prathap et al. 1966 (Special topic; spontaneous arterial lesions; Antarctic seal); Prothero 1980 (Haematology; scaling of blood parameters in mammals); Puett et al. 1973 (Haematology; myoglobin; conformation stabilities of homologous hemoproteins of several spp.); Pugsley & Harding 1938 (Lipid; oil from hair seal & sea lion); Puppione et al. 1970 (Haematology; lipid; protein; serum lipoproteins & their potential characterization); Rae 1968 (Food; Scotland), 1973b (Food); Ray 1970 (Special topic; population ecology); Razumovskii 1933 (Special topic; spring trapping); Reichenow 1839 (Bibliography; Phocidae); Reijnders 1982b (Reproduction; toxic compounds; fertility decrease by exposure to large amounts of PCB); Reish 1976 (Toxic compounds; marine pollution); Reiter 1974 (Endocrinology; pineal regulation of hypothalmo-pituitary axis gonadotropins); Repenning 1975 (Taxonomy & evolution; evolution of Odobenidae & Otariidae); Reutenauer & Regent 1948 (Lipid; determination of iodine No. of oils); Rice 1977a (Bibliography; world list); Rideout et al. 1976 (Synthesis of substituted naphthoquinones related to crinoid pigments); Ridgway 1965 (Care; haematology; medical care), 1970 (Care; special topic; veterinarian & marine research), 1972 (Haematology; mineral; thermoregulation; homeostasis), Ridgway & Flanigan 1981 (Special topic; humane killing); Ridgway & Harrison 1981a (Nutrition; reproduction; thermoregulation; care; handbook); Ridgway et al. 1975 (Special topic; diseases); Riou 1947a (Lipid; chemical & physical characteristics of oil), 1947b (Product; residue after rendering); Robin 1966 (Carbohydrate & energetics; mitochondria); Robson 1966 (Food; Otariidae; Phocidae; visual orientation & feeding); Ronald et al. 1976 (Bibliography; annotated), 1983 (Bibliography; annotated); Sacher 1974 (Reproduction; special topic; relation of gestation to brain weight for placental animals; implications for the theory of vertebrate growth); Sarich 1969b (Taxonomy & evolution; Otariidae; Odobenidae; Phocidae; pinniped phylogeny); Scheffer 1950a (Special topic; growth layers of teeth indicate age), 1952 (Special topic; thermoregulation; ecological life history studies), 1958 (Special topic; seals, sea lions & walrus); Schmidt-Nielsen 1979 (Thermoregulation; animal physiology, adaptation to environment); Scholander 1963 (Diving; master switch to life); Scholander et al. 1942a (Diving; carbohydrate & energetics; aerobic & anaerobic changes in muscle during diving); Scholander 1965 (Bibliography); Schreiber 1976 (Special topic; cytological studies); Seal et al. 1971b (Taxonomy & evolution; biochemical population genetic, phylogenetic & cytological studies of Antarctic spp.); Serat et al. 1977 (Toxic compounds; haematology; nutrition; DDE & DDT in Inuit blood & diet); Selvig & Selvig 1962 (Mineral; mineral content in cementum); Sergent 1973c (Reproduction; environment & reproduction); Severinghaus 1979 (Bibliography); Severinghaus & Nerini 1977 (Bibliography); Shaughnessy 1970 (Haematology; serum proteins in relation to taxonomy; Arctocephalus spp.); Shel'puk 1957 (Vitamin; vitamin A in fat); Shepeleva 1963b (Enzyme; secretion function of stomach); Shergin et al. 1967 (Protein; proximate composition; carbohydrate & energetics; lipid; milk & lactation, chemical composition of milk); Simpson 1970 (Toxic compounds; effect of pollution); Sinclair 1981 (Lipid; special topic; essential fatty acids (linoleic & linolenic acid families) from seals in Eskimo diets; prostaglandin); Siniff 1981 (Special topic; population; dynamics & ecology); Skinder & Mead 1979 (Special topic; strandings; on site problems & solutions); Sleptsov 1949 (Reproduction; Far East pinnipeds); Smirnov 1927 (Care; Phocidae; diagnostic remarks of seals in N. hemisphere); Smith & Joule 1981 (Taxonomy & evolution; population dynamics; book); Soederberg 1971a (Food; food habits; Baltic Sea), 1971b (Food; commercial damage & feeding habits); Sokolov 1958 (Food; feeding in Lake Ladoga), 1959 (Special topic; structure of cutaneous integuments), 1969 (Haematology; myoglobin; Otariidae; Phocidae; quantity of myoglobin & blood); Sokolov et al. 1966 (Special topic; internal organ weights; Bering Sea); Solianik 1964 (Special topic; marking); Southcott et al. 1971 (Vitamin; vitamin A content of liver; Antarctic & Subantarctic regions); St. Aubin 1976 (Enzyme; tissue enzyme distribution in phocids); Stirling 1982 (Taxonomy & evolution; evolution of mating system); Stirling et al. 1977a (Special topic; distribution & abundance, E. Beaufort Sea), 1983 (Biological sonar; underwater vocalization as a tool for studying distribution and relative abundance during wintering in High Arctic), 1982 (Special topic; distribution & abundance, E. Beaufort Sea); Stout 1969 (Special topic; nutrition; atherosclerosis); Stroud et al. 1979 (Special topic; causes of death, Washington & Oregon); Sundstrom et al. 1975 (Toxic compounds; structure of phenolic metabolites of p,p'-DDE); Svizhenko 1983 (Biological sonar; analysis of spectral characteristics of sound signals); Sweeney 1973 (Special topic; care; management of disease), 1974 (Special topic; common diseases), 1974a (Care; procedures for clinical management), 1978 (Reproduction); Sweeney & Geraci 1979 (Care; special topic; medical care of strandings); Takaoka 1944 (Enzyme; protein; protease in fur seal); Takaoka et al. 1953 (Endocrinology; insulin); Tamiya 1977 (Enzyme; protein; ATPase accelerating peptides of muscle), 1977a (Enzyme; protein; ATPase accelerating peptides of muscle), Tawara 1950 (Hematology; respiratory pigments in blood); Thobro 1973 (Special topic; tagging, N. Atlantic); Thuesen 1953 (Lipid; cholesterol content in oil); Tinoco 1982 (Lipid); Todd 1968 (Bibliography; book & articles); Tollin 1969 (Myoglobin); Trillmick 1983 (Anaesthesia; Galapagos sea lions & fur seals; ketamine-xylazine combination for immobilization); Tsuchuya & Okubo 1953 (Lipid; fatty acid composition of liver, heart & lung); Tsujimoto 1916 (Lipid; Saghalien seal oil); Ueno & Iwai 1939 (Lipid; oil; Antarctic); U.S. Fish & Wildlife Service n.d. (Special topic; outfit for capturing); U.S. Antarctic Projects Officer 1965 (Toxic compounds; pesticides in Antarctic); U.S. Marine Mammal Commission 1979 (Bibliography); Van Haaften 1962 (Special topic; disease in Dutch coastal waters); Van Hove-Holdrinet 1979 (Toxic compounds; mirex & cis-chlordane & trans-chlordane); Vernburg 1976

(Toxic compounds; pollution); Ver Ploeg et al. 1971 (Myoglobin; mechanism & catalysis for addition of cyanide to myoglobins); Vladimirov 1983 (Reproduction; females; Urilye Lair Mednye I., USSR); Von Gaver 1923 (Lipid; oil); Wagemann & Muir 1984 (Toxic compounds; heavy metals & organochlorines; overview & evaluation); Wartzok et al. 1975 (Special topic; recording instrument package); Williams & Makhrov 1935 (Lipid; chemical study of oil); Winters & Carscadden 1978 (Food; capelin ecology & estimation of surplus yield from predator dynamics; review); Wo & Draper 1973 (Vitamin; vitamin E levels in Eskimo; seals, food); Wood 1978 (Bibliography), 1980 (Bibliography); Yoshida & Nakamura 1979 (Toxic compounds; PCB in blubber); Yurkowski & Brockerhoff 1966 (Lipid; fatty acid distribution in triglycerides from oil); Zasypkin 1982 (Enzymes; haematology; Phocidae; glyoxalase I polymorphisms); Zhirmunskii et al. 1980 (Special topic; symposium on physiology & biochemistry); Zitko 1975 (Toxic compounds; aromatic compounds); Zubchenko 1977 (Special topic; biosorption); Zvorykin 1980 (Taxonomy & evolution; new criteria for origin; genetics).

Otarioidea; Odobenidae

Odobenus rosmarus (Linnaeus, 1758) (Walrus)

Arnason 1977 (Taxonomy & evolution; relationship between 4 principle pinniped karotypes), 1981 (Taxonomy & evolution; genetics; localizing of nucleolar organizing regions in karotypes); Arvy 1973 (Endocrinology; adrenal glands; biochemistry); Bartlett 1867 (Food; remarks on food); Belopolskii 1935a (Lipid; oils); Birchard et al. 1978 (Toxic compounds; effects of oil spills); Blix & Steen 1979 (Thermoregulation; newborn; review); Borisov 1969b (Haematology; protein; antigenic properties of serum proteins); Born et al. 1981 (Toxic compounds; Hg, DDT & PCB in muscle, liver & blubber of female & male neonates & adults); Born & Kristensen In Press (Special topic; biology & exploitation; Thule district, N. Greenland); Brinck 1947 (Bibliography; history of zoology); Brooks 1953 (Special topic; food; reproduction; importance to Inuit economy); Brown 1962 (Care; health problems in captive calves); Buckley 1958 (Bibliography; review of current knowledge); Burne 1909 (Special topic; notes on viscera); Burns 1965 (Special topic; ecology & management; Alaska); Charters 1947 (Bibliography); Davis et al. 1978 (Special topic; numbers & distribution, central, Canadian high Arctic); Dolbish 1955 (Vitamin; vitamin A content in liver); Dunbar 1949 (Food; Arctic & subarctic), 1954 (Special topic; status in Canada); Fay 1952 (Food; progress report), 1957 (Food; special topic; history & present status), 1960 (Food; Arctic zoonoses); 1981 (Taxonomy & evolution; reproduction; nutrition; care; handbook), 1982 (Food; special topic; ecology & biology, O.r. divergens); Fay & Kelly 1980 (Special topic; mass natural mortality; St. Lawrence I., 1978); Fay & Ray 1979 (Reproduction; reproductive behavior in relation to population structure); Fay et al. 1977 (Food; impact on their food resource; Bering Sea, U.S.A.); Fedoseev 1982 (Food; thermoregulation); Feltz & Fay 1966 (Thermoregulation; thermal requirements in vitro of epidermal cells); Galster & Burns 1972 (Toxic compounds; accumulation of pesticides in Alaskan marine mammals); Gavrilenko 1952 (Vitamin; vitamin A content in liver; Chukchi Sea area); Goldfischer 1967 (Myoglobin; in striated muscle); Gulliver 1847 (Haematology; measurement of blood red corpuscles); Hagenbeck 1962 (Special topic; notes on captivity); Hammarsten 1909 (Special topic; lipid; analysis of bile); Hart & Fisher 1964 (Thermoregulation; adaptations to polar environment); Heu 1978 (Taxonomy & evolution); Kiliaan & Stirling 1978 (Special topic; observation of overwintering in E. Canadian high Arctic); Krogh & Iversen 1968a (Thermoregulation; comparative studies on temperature gradients in limbs & blubber), 1968b (Carbohydrate & energetics; thermoregulation; metabolism); Krylov 1965 (Nutrition; special topic; determination of age, rate of growth & analysis of age structure of Pacific walrus), 1971 (Food; O. r. divergens; feeding); Lenfant & Johansen 1968 (Haematology; morphological & chemical properties of blood); Lincoln et al. 1973 (Haematology; taxonomy & evolution; hemoglobin electrophoresis); Ling 1965c (Special topic; integument; functional significance of sweat glands & sebaceous glands); Loughrey 1959 (Food; O.r. rosmarus; preliminary investigation); Lowry & Fay 1981 (Food; Bristol Bay, Alaska); Lowry et al. 1980a (Food; special topic; trophic interaction with bearded seals in the Bering Sea & Chukchi Sea; eat crustaceans & molluscs), 1979 (Food; carrying capacity for feeding in Bering & Chukchi seas); Lowry & Frost 1981 (Food; special topic; feeding & trophic relationships in E. Bering sea); Lyall-Watson (Care; milk & lactation; nutrition; animal milk analysis; hand-rearing techniques); Mansfield 1956 (Reproduction; male reproduction cycle), 1958 (Food; molting; biology; E. Canadian Arctic), 1959 (Food; Canadian Arctic), 1964 (Special topic; present & future research), 1966a (Food; Canadian Arctic), 1966b (Food; molting; Canadian Arctic), 1973 (Special topic; food; Canada; Greenland); Nyholm 1975 (Special topic; food; observation; Spitsbergen, 1971-1972); Oliver 1981 (Food; benthic prospective; Bering Sea); Oliver et al. 1983 (Food; eat polychaetes, bivalves & crustaceans; Bering Sea); Olsson 1980 (Taxonomy & evolution; content of C-14; N. Europe); Pauly & Wolfe 1957 (Taxonomy & evolution; haematology; serological relationship among Carnivora); Puppione 1969 (Haematology; lipid; protein; physical & chemical characterization of serum lipoproteins); Puppione & Nichols 1970 (Haematology; lipid; protein; characterization of chemical & physical properties of serum lipoproteins); Ray & Fay 1968 (Special topic; thermoregulation; influence of climate on distribution; evidence from physiological characteristics); Reeves 1978 (Bibliography; literature survey & status report); Repenning 1975 (Taxonomy & evolution), 1976 (Taxonomy & evolution; adaptive evolution); Salter 1979 (Special topic; site utilization activity budgets & disturbance responses during terrestrial haul-out); Sarich 1969b (Taxonomy & evolution; adaptive evolution); Salter 1979 (Special topic; site utilization activity budgets & disturbance responses during terrestrial haul-out); Sarich 1969b (Taxonomy & evolution; pinniped phylogeny), 1972 (Haematology; non-identity of several carnivore hemoglobins); Scheffer 1958 (Special topic; general); Schroeder 1933 (Nutrition; cow's milk protein hyper-

sensitivity); Simonsen et al. 1982b (Haematology; protein; taxonomy & evolution; O. r. rosmarus; electrophoretic variation of liver, blood & muscle proteins; 21 enzymes; proalbumin & transferrin; polymorphism; Thule district, Greenland); Smith et al. 1983b (Special topic; new calicivirus isolated from feces; Pribilof I., Alaska; S. central Chukchi Sea); Sökolov 1966 (Haematology; ecolo-functional & age peculiarities of red blood; N. Pacific), 1967 (Haematology; blood properties; N. Pacific); Greenland); Smith et al. 1983b (Special topic; new calicivirus isolated from feces; Pribilof I., Alaska; S. central Chukchi Sea); Sökolov 1966 (Haematology; ecolo-functional & age peculiarities of red blood; N. Pacific), 1967 (Haematology; blood properties; N. Pacific); Svizhenko 1983 (Biological sonar; analysis of spectral characteristics of sound signals); Versaggi 1975 (Mineral; haematology; relation to acid-base homeostasis; intraosseous architecture); Vibe 1950 (Food; Thule district, Greenland); West et al. 1979b (Lipid; milk & lactation; fatty acid composition of skin & blubber fat in males, lactating & non-lactating females); Wilber & Musacchia 1950 (Lipid; comparison of lipids of Arctic marine mammals); Wolk & Kosygin 1979 (Haematology; physical parameters of blood; hemoglobin volume; erythrocyte & leukocyte counts; mean corpuscular hemoglobin content; diameter of erythrocytes & sedimentation rate of blood).

Otarioidea; Otariidae; Archocephalinae

Arctocephalus australis (Zimmerman, 1783) (Falkland's fur seal; South American fur seal)

Lombardi et al. 1971 (Lipid; composition of oil, triglyceride content & fatty acid composition of oil); Martinez 1980 (Haematology; hematological & serological studies); Philippi 1888 (Bibliography); Zoological Society of London 1978 (Care; captivity).

Arctocephalus doriferus (Wood Jones, 1925) (Australian fur seal)

Zoological Society of London 1978 (Care; captivity).

Arctocephalus forsteri (Lesson, 1828) (New Zealand fur seal)

Crawley & Brown 1971 (Special topic; measurement of tagged pups & population estimates); Crawley et al. 1977 (Special topic; reproduction; activity budgets during breeding season); Erickson & Hofman 1974 (Special topic; behaviour & distribution; Antarctic); Gentry 1981 (Protein; water; sea water drinking; nitrogen excretion in fasting animals); Kerry & Messer 1968 (Carbohydrate & energetics; enzyme; haematology; milk & lactation; nucleic acid; intestinal glycosidases; pancreatic amalyase; low intestinal lactase; sucrase; trehalase; erythrocyte hexose-1-PO_4; uridyl transferase; UDP-glucose pyrophosphatase; milk lactase); Ling 1965c (Special topic; integument; functional significance of sweat & sebaceous glands); Stirling 1971b (Special topic; behavior); Wells 1978 (Carbohydrate & energetics; haematology; oxygen transport; hemoglobin concentration; blood hematocrit; mean cell hemoglobin content; erythrocyte 2,3-diphosphoglycerate).

Arctocephalus galapagoensis (Heller, 1904) (Galapagos fur seal)

Clarke & Trillmich 1980 (Food; cephalopods; Galapagos Islands).

Arctocephalus gazella (Peters, 1875) (Antarctic fur seal; Kerguelen fur seal)

Bonner & Hunter 1982 (Food; eat penguins); Bonner & McCann 1982 (Special topic; neck collar; tagging; S. Georgia & S. Atlantic Ocean); Condy 1981b (Food; animal food consumption & seasonal fluctuation in biomass of seals at Marion I., S. Pacific); Kerley & Bester 1983 (Special topic; body fluid & whole mass corrections from piecemeal determination); Kooyman & Davis 1981 (Food; feeding behaviour of female); Payne 1979 (Nutrition; growth); Peaker & Goode 1978 (Carbohydrate & energetics; milk & lactation; mineral; composition of milk; lactose, citrate, Na, K, Cl, Ca, Mg, PO_4 & fat content from 0 to 26 days after post partum; 40% fat).

Arctocephalus philippi (Peters, 1866) (Guadalupe fur seal; Juan Fernandez seal)

Phillippi 1888 (Bibliography).

Arctocephalus pusillus (Schreber, 1776) (Cape fur seal; South African fur seal)

Arnason 1975a (Taxonomy & evolution; relationships between 4 principle karotypes), 1981 (Taxonomy & evolution; localization of nucleolar organizing regions in karotypes); Bester 1975 (Special topic; functional morphology of kidney); Carnio et al. 1982 (Care; reproduction; management and breeding at metro zoo, Toronto, Canada; gestation, weaning, growth & feeding); Cleland & Southcott 1969 (Product; vitamin; illness from eating liver); Fletemeyer 1978 (Special topic; laminae in teeth used for ageing); Guiler 1978 (Special topic; strandings); Hayashi et al. 1968 (Endocrinology; product; vasodilating peptides); Karnovsky & Rapson 1947 (Lipid; products; Fitelson method of "squalene" determination on oil); Lategan 1948 (Vitamin; vitamin A content in oils; South Africa); Ling 1965c (Special topic; integument; functional significance of sweat & sebaceous glands); Lyall-Watson 1962 (Care; nutrition); Bonner & McCann 1982 (Special milk & lactation; animal milk analysis & hand-rearing techniques); Peak et al. 1971 (Carbohydrate & energetics; enzyme; comparison of lactate dehydrogenase isozymes); Rand 1955 (Reproduction; females); Shaughnessy 1981 (Vitamin; geographical variation in vitamin A content of adult male livers); Southcott et al. 1974 (Vitamin; A. p. doriferus; vitamin A content in liver); Thurman et al. 1982 (Anaesthesia; care; anaesthetic & treatment of a chronic eye infection & amputation); Zoological Society of London 1978 (Care; captivity).

Arctocephalus tasmanicus (Scott & Lord, 1926) (Tasmanian fur seal)

Kerry & Messer 1968 (Enzyme; haematology; carbohydrate & energetics; milk & lactation; nucleic acid; intestinal glycosidases; pancreatic amylase; intestinal lactase (low); sucrase; trihalase; erythrocyte hexose-1-PO_4; uridyl transferase; UDP-glucose pyrophosphatase; milk lactase).

Arctocephalus tropicalis (Gray, 1872) (Subantarctic or Amsterdam Island fur seal)

Bester & Kerley 1983 (Food; rearing twin pups to weaning by a female); Condy 1981b (Food; annual food consumption; seasonal fluctuation of biomass of seals, Marion I., S. Pacific Ocean); Erickson & Hofman 1974 (Special topic; distribution & behaviour; Antarctic).

Arctocephalus spp.

Shaughnessy 1970 (Haematology; protein; taxonomy & evolution; serum protein variations); Stirling & Warneke 1971 (Taxonomy & evolution).

Callorhinus ursinus (Linnaeus, 1758) (Northern fur seal; Alaskan or Pribilof fur seal)

Aman 1973 (Endocrinology; gonadotrophic factors effecting the onset of reproductive maturity of females), 1975 (Reproduction; reproductive maturity in females; affected by gonadotropic factors); Anas 1970 (Toxic compounds; Hg); 1971 (Toxic compounds; organochlorine pesticides), 1973 (Toxic compounds; Hg), 1974a (Toxic compounds; Hg, Cd & Pb in fetal & newborn liver, kidney & muscle; levels vary with age); Anas & Wilson 1970a (Toxic compounds; milk & lactation; PCB, dieldrin, DDT & metabolites in blubber & muscle of unborn & in ingested milk, brain, liver & blubber of nursing pups), 1970b (Toxic compounds; PCB, dieldrin, DDT & metabolites in adults & unborn; liver & brain); Anas & Worlund 1975 (Toxic compounds; special topic; PCB & DDT in blubber of 8-13 year-old adult; blubber sampling technique), Andreev 1978 (Special topic; structural & functional properties of eye); Arnason 1977 (Taxonomy & evolution; relationship between 4 principle pinniped karotypes); Ashworth et al. 1966 (Milk & lactation; proximate composition; composition of milk & spp. differences); Bailey 1952 (Lipid; oil; Canada); Baker et al. 1970a (Special topic; general); Bartlett & Weir 1974 (Reproduction; circulating levels of oestradiol in early pregnancy estrogen surge prior to ova implantation); Blix & Grav 1979 (Thermoregulation; non-shivering thermogenesis in skeletal muscle); Blix et al. 1979 (Thermoregulation; do they suffer from cold?); Blix & Steen 1979 (Thermoregulation; newborns; review); Bogdanov et al. 1977 (Enzyme; protein; population study; taxonomy & evolution; biochemical polymorphism; N.W. Pacific Ocean); Bonham 1941 (Food; stomach examinations, April 25, 1941); Bonner & McCann 1982 (Special constituents change with age & sex); Bowes & Jonkel 1975 (Toxic compounds; PCB; food chains in Arctic & subarctic); Brown et al. 1975 (Special topic; renal lymphosarcoma); Bychkov 1971/1972 (Special topic; age variation of body length & weight; Cavagnolo 1979 (Haematology; immunology); Cavagnolo & Vedros 1978 (Haematology; protein; identification & characterization of 3 immunoglobin classes in serum & throat mucus), 1978a (Haematology; protein; immunoglobin levels), 1979 (Haematology; protein; serum & colostrum immunoglobin levels of adult; IgG, IgM & IgA); Chapman 1962 (Special topic; problems in analysis of tagging experiments); Chernoivanov & Bogdanov 1979 (Enzyme; haematology; taxonomy & evolution; population studies; inherited polymorphism of blood serum peroxidase); Chuba et al. 1970 (Haematology; β-like blood factor); Chugunkov 1970 (Special topic; tag losses, Commander Islands, USSR); Clegg 1951 (Lipid; characterization of oil from cold rendered blubber); Clemens & Wilby 1933 (Food; coast of British Columbia); Clemens et al. 1936 (Food; stomach contents; coast of Vancouver I.); Cowan et al. 1981 (Carbohydrates & energetics; reproductive bioenergetics); Craig 1964 (Endocrinology; reproduction; histology of reproduction & estrus cycle in the female), 1966 (Reproduction; female); Cushing 1961 (Taxonomy & evolution; haematology; blood typing); Daniel 1967 (Endocrinology; reproduction; diapausing blastocyst), 1971a (Endocrinology; protein; reproduction; growth of preimplantation embryo & its correlation with changes in uterine protein), 1971b (Reproduction; embryo dormancy), 1972 (Endocrinology; blastokinin), 1974 (Endocrinology; reproduction; circulating levels of estradiol-17-β during early pregnancy showing estrogen surge preceding implantation), 1975 (Endocrinology; reproduction; concentration of circulating progesterone during early pregnancy), 1981 (Endocrinology; reproduction; delayed implantation due to growth inhibitor); Daniel & Krishnan 1969 (Endocrinology; reproduction; uterine fluid components; diapausing state of blastocysts; delayed implantation); Dosako et al. 1983 (Milk & lactation; protein; carbohydrate & energetics); Elden et al. 1971 (Endocrinology; enzyme; function of pineal body in pups, bulls & preadult males; hydroxy-O-methyltransferase; photoperiodic nature of life cycle); Farmer 1899 (Special topic; electrical experiments in branding pups 1877); Fiscus et al. 1980 (Food; California & Washington); Fowler 1982 (Food; special topic; interaction with commercial fisheries); Fujino & Cushing 1960 (Haematology; taxonomy & evolution; blood types); Garibaldi et al. 1979 (Special topic; beachings); Gentry 1981 (Protein; water; sea water drinking; nitrogen excretion in fasting animals), 1981a (Nutrition; taxonomy & evolution; reproduction; care; handbook); Gentry et al. 1981 (Reproduction; estrus); Gentry & Johnson 1978 (Anaesthesia; special topic; physical restraint for immobilizing), 1981 (Special topic; neonates are eaten by Eumatopias jubatus; Alaska); Geraci 1981a (Nutrition; care; dietary disorders); Ginatulina et al. 1982a (Nucleic acid; molecular structure of genome), 1980b (Nucleic acid; molecular structure of genome); Goldblatt & Anthony 1983 (Toxic compounds; heavy metals; Pribrilof I., Alaska); Grav & Blix 1979 (Thermoregulation; thermogenesis (nonshivering) in skeletal muscle, coupling of mitochondria); Hayashi et al. 1966 (Endocrinology; product; vasoactive polypeptides from muscle & viscera; clinical applications, vasodilator); Hayashi et al. 1968 (Endocrinology; product; vasodilating peptides); Hayashi & Suzuki 1967 (Endocrinology; protein; biologically-active peptide in muscle); Hayashi et al. 1969 (Endocrinology; peripheral vasodilator);

Higashi et al. 1960 (Nutrition; lipid; vitamin; fatty acid of liver from liver of pregnant & non-pregnant; vitamin A, B_1 & B_6 are low in pregnant); Hunter & Madin 1976 (Haematology; lipid; protein; clinical blood value; serum cholesterol, globulins, total protein, BUN & bilirubin), 1978 (Haematology; lipid; mineral; protein; clinical blood values in fresh & frozen serum samples; all change except total protein, globulins, P & creatinine), 1978a (Haematology; special topic; compare eye fluid with blood serum); Imamura 1944 (Vitamin; vitamin A in oil); International Nickel Company Inc. 1956 (Special topic; monel tags; migration); Irving et al. 1962 (Thermoregulation; temperature regulation); Jones 1981 (Food; food habits in N. California, U.S.A.); Jordan & Clark 1899 (Special topic; experiments in herding & branding), 1912 (Bibliography; review & on enemies); Judge 1899 (Special topic; branding on St. George, Pribilof I., U.S.A.); Kajimura et al. 1981 (Food; off California & Washington); Keyes 1965 (Care; special topic; pathology), 1966 (Anaesthesia; immobilization, tranquillizing & anaesthesizing drugs); Keyes et al. 1971a (Mineral; carbohydrate & energetics; protein; analysis of urine), 1971b (Endocrinology; seasonal fluctuation of hydroxyindole levels in pineal gland); Kim 1974 (Toxic compounds; Hg in tissues); Kishori & Guinn 1972 (Toxic compounds; base line studies; Hg, Se & Zn in marine mammals); Kolesnik & Timofeema 1980 (Milk & lactation; nutrition; growth, nutrition & production; Tyuleny I., USSR); Kooyman et al. 1977 (Thermoregulation; thermal conductance of immersed pelts before & after oiling with Prudhoe Bay crude); Krogh & Iversen 1968a (Thermoregulation; comparative studies on temperature gradients in limbs & blubber; Arctic), 1968b (Carbohydrate & energetics; thermoregulation; metabolism; Arctic); Kubota & Quanbunchan 1965 (Special topic; experimental studies of tooth development by means of EDTA-PB subcutaneous injections); Kurtz & Kim 1976 (Toxic compounds; hydrocarbon & biphenyl residues in tissues & lice); Kuzin 1971 (Haematology; morphologic patterns of blood in ontogeny), 1972 (Haematology; pecularities of red blood in embryo); Kuzin & Sokolov 1970 (Haematology; red blood cells in embryos & newborn); Lander 1979 (Special topic); Lavigne & Ronald 1975 (Vitamin; visual pigments), 1981 (Special topic; reproduction; life table & biomass estimate); Lenfant & Johansen 1968 (Haematology; morphological & chemical properties of blood); Leone & Wiens 1956 (Taxonomy & evolution; haematology; comparative serology); Lincoln et al. 1973 (Haematology; taxonomy & evolution; hemoglobin electrophoresis); Ling 1965c (Special topic; integument; functional significance of sweat & sebaceous glands); Mangold & Malins 1960 (Lipid; fractionation of oil, fats & waxes); Marakov 1963 (Anaesthesia; experiment in immobilization by electric current); Matsumoto et al. 1976 (Protein; muscle hydrolysate peptides with vasoactive & vasodilating function); McAlister 1981 (Thermoregulation; carbohydrates & energetics; heat loss & energy consumption); McDonald 1914 (Bibliography); McHugh 1952 (Food; eat black-footed albatross); Mead 1953 (Food; eat fish; food habits; Japanese waters); Mikeladze 1971 (Care; Batumi aquarium); Miller 1978 (Carbohydrates & energetics; special topic; energetics in relation to climate & food resources; Bering Sea), 1978a (Carbohydrates & energetics; energetics in relation to climate & food resources of Bering Sea); Miyauchi & Sanford 1947 (Vitamin; vitamin A content in liver, carcass & blubber oil); Murray 1899 (Special topic; experiments in branding & herding; St. Paul I., 1897); Nelson & Barnett 1970 (Proximate composition; meat); Nesterov 1965 (Anaesthesia; immobilization), 1966 (Anaesthesia; experimental use of ditilinum to kill); O'Ferrell & Daniel 1971 (Endocrinology; reproduction; estrogen-binding in uteri with delayed implantations); Ohata et al. 1975 (Water; proximate composition; water metabolism & body composition), 1977 (Thermoregulation; thermal responses to pelagic conditions), 1977a (Carbohydrate & energetics; model of energy balance; Arctic); Ohata & Miller 1976 (Thermoregulation; management based on metabolic & thermoregulatory studies), 1977 (Thermoregulation; responses to forced activity on land), 1977a (Thermoregulation; temperature responses of pups); Olafson & Thompson 1974 (Mineral; protein; toxic compounds; isolation of heavy metal-binding proteins); Oliver 1912/1913 (Reproduction; spermatogenesis); Panina 1966a (Food; W. Pacific), 1969 (Food; Bering Sea), 1970 (Food; nutrition on Commander I., USSR), 1971 (Food; food habits & food resources in Sea of Japan), 1972 (Food; nutrition; fattening as indicator well fed fur seals during pelagic period of their life); Patten & Saruba 1979 (Special topic; strandings in Los Angeles & Orange counties); Payne 1977 (Nutrition; growth of population); Pearson & Enders 1951 (Reproduction; observations); Perez 1981 (Food; stomach contents); Perez & Mooney 1981 (Milk & lactation; carbohyrates & energetics; nutrition food consumption of lactating seals); Perks 1977 (Endocrinology; taxonomy & evolution; neurohypophysis, development & evolutionary aspects); Peterson 1965 (Care; drugs for handling); Philippi 1888 (Bibliography); Prato et al. 1974 (Special topic; serological evidence for calicivirus transmission between marine & terrestrial animals); Puppione 1969 (Haematology; lipid; protein; physical & chemical characterization of serum lipoproteins); Ramaiah 1965 (Milk & lactation; lipid; quality & fatty acid composition of milk fats); Sanford et al. 1949 (Vitamin; vitamin A in liver); Sarich 1972 (Haematology; non-identity of several carnivore hemoglobins); Scheffer 1950 (Food); Scheffer et al. 1950 (Vitamin; vitamin A in selected pale-colored livers); Schmidt et al. 1971 (Milk & lactation; nutrition; enzyme; carbohydrate & energetics; lactose synthetase activity in milk); Schultz & Rafn 1936 (Food; stomach contents; Washington); Shimma & Taguchi 1961 (Lipid; vitamin; survey of liver oils & its vitamin A content); Shun'ichi et al. 1983 (Milk & lactation; protein; carbohydrate & energetics; composition of carbohydrates & proteins); Smith et al. 1976 (Haematology; special topic; serotypes of San Miguel sea lion virus serum); Spalding 1964 (Food; comparative feeding habits, British Columbia); Spotte 1980 (Care; endocrinology; use of anabolic steroids for acclimation of adults to captivity); Spotte & Adams 1979 (Food; food intake), 1981 (Food; feeding rate of captive adults); Starks 1927/1928 (Reproduction; spermatogenesis); Stedman et al. 1976 (Special topic; lymphosarcoma in infant

seal), 1977 (Special topic; lymphosarcoma in infant seals); Stromberg et al. 1980 (Nucleic acid; nutrition; growth potential of cells; SV40 early region DNA); Stroud & Stevens 1980 (Special topic; lymphosarcoma); Suzuki et al. 1974 (Endocrinology; protein; peripheral vasodilating action of peptide from skeletal muscles; different ages & sexes); Swartzman & Haar 1983 (Food; eat fish; population & fishing, Bering Sea); Tamiya et al. 1976 (Protein; enzyme; muscle peptide effect on actomyosin); Tamiya & Matsumoto 1979 (Enzyme; nucleic acid; protein; adenosine triphosphatase; accelerating peptide from muscle hydrolysate); Taylor et al. 1955 (Food; distribution & food habits in N. Pacific); Taylor 1971 (Food; eat Pacific herring; stomach contents); Todd 1969 (Bibliography; recent literature); Tomilin 1977 (Thermoregulation; anaesthesia; immobilization); Tsunoo et al. 1967 (Protein; histidine compounds in musculature & brain); Urmanov 1971 (Special topic; angioarchitectonics of the liver with reference to gall-excretion system); U.S. Fish and Wildlife Service 1958 (Bibliography); Vizsolyi 1972 (Endocrinology; reproduction; neurohypophyseal physiology during fetal development and pregnancy); Vizsolyi & Perks 1969 (Endocrinology; reproduction; new neurohypophysical principle in fetal mammals), 1974 (Endocrinology; reproduction; isolation of arginine vasotocin from fetal seal neurohypophyses); Wada 1971 (Food; food & feeding habits; Sanriku, Japan), 1979 (Food; feeding habits; Sanriku, Japan); Wagemann & Muir 1984 (Toxic compounds; heavy metals & organochlorine concentrations); Waldorf & Vedros 1979 (Lipid; fatty acid content in depot fat); Warn 1965 (Endocrinology; reproduction; histology of reproduction & estrus cycle in maturing females); Wilber 1952 (Special topic; lipid; blubber); Wilke 1958 (Milk & lactation; lipid; fat content of milk); Wilke & Kenyon 1952 (Food; notes on food), 1954 (Food; migration & food habits), 1957 (Food; E. Bering Sea); York 1983 (Reproduction; average age at first reproduction).

Otarioidea; Otariidae; Otariinae

Eumetopias jubata (Schreber, 1776) (Steller's sea lion; northern sea lion)

Andreev 1978 (Special topic; structural & functional properties of the eye); Arvy 1973 (Endocrinology; adrenal gland; biochemistry); Bailey 1952 (Lipid; marine oils; Canada); Belopolskii 1935a (Lipid; oils); Brocklesby 1941 (Lipid; product; chemistry & technology of oils); Feltz & Fay 1966 (Thermoregulation; thermal requirements in vitro of epidermal cells); Fiscus 1962 (Food; stomach contents; variety); Fiscus & Baines 1966 (Food; feeding behaviour); Franzmann et al. 1981 (Haematology; ω-endorphin levels in blood); Garibaldi et al. 1979 (Special topic; beachings); Gentry 1981 (Protein; water; sea water drinking; nitrogen excretion in fasting animals); Gentry & Johnson 1981 (Food; eat neonates of Callorhinus ursinus; Alaska); Geraci 1981a (Nutrition; care; dietary, disorders); Hamanaka et al. 1982 (Toxic compounds; age related change & distribution of Cd & Zn concentrations in liver & kidney; Hokkaido, Japan); Hayashi et al. 1968 (Endocrinology; product; vasodilating peptide); Jones 1981 (Food; food habits in N. California, U.S.A.); Kretchmer & Sunshine 1967 (Carbohydrate & energetics; enzyme; intestinal disaccharidase deficiency); Krogh & Iversen 1968a (Thermoregulation; comparative study of temperature gradients in limbs & blubber of Arctic marine mammals), 1968b (Carbohydrate & energetics; thermoregulation; metabolism in Arctic mammals); Kyte 1956 (Product; proximate composition; water, oil, protein, ash & glycogen; technological studies on processing); Lenfant & Johansen 1968 (Haematology; morphological & chemical properties of blood); Lidicker et al. 1981 (Taxonomy & evolution; biochemical variations tissues; 32 loci by electrophoresis; Alaska); Malvin et al. 1978 (Endocrinology; mineral; renin & aldosterone levels; regulation of salt balance); Mathisen et al. 1962 (Food; nutrition; reproduction; stomach contents; breeding habits & growth); Minato & Ikeda 1949 (Lipid; constituents of bile from Eumetopia tubata; 3,7,12-triketocholanic acid); Nesterov 1971 (Anaesthesia; use of curare-like drug for immobilization); Norris et al. 1974 (Special topic; new tagging & tracking methods for study biology and migration); Osborne 1983 (Reproduction; breeding; parturition; California); Panina 1966b (Food; Kurile I.), 1966c (Food; Kurile I.); Paully & Wolfe 1957 (Taxonomy & evolution; haematology; serological relationship among Carnivora); Perlov 1975 (Food; feeding in Kurile I.); Pinney et al. 1965 (Care; raising of pups); Pitcher 1981 (Food; eat fish & octopus; Gulf of Alaska); Pitcher & Calkins 1975 (Toxic compounds; distribution in relation to petrochemical development; Prince William Sound & Gulf of Mexico); Poulter et al. 1965 (Care; rearing); Puppione 1969 (Haematology; lipid; protein; physical & chemical characterization of serum lipoproteins); Puppione & Coggiola 1966 (Haematology; lipid; protein; serum lipoprotein distribution); Rakestraw & Swain 1923 (Haematology; protein; uric acid content in blood); Shimao 1964 (Lipid; bile salts; ω-phocaecholic & dehydrochenodeoxycholic acids); Sokolov 1966 (Haematology; ecolo-functional & age peculiarities of red blood), 1967 (Haematology; blood properties; N. Pacific); Spalding 1964 (Food; comparative feeding habits, British Columbia); Stroud & Roffe 1979 (Special topic; causes of death in stranded, Oregon); Sunshine & Kretchmer 1964 (Carbohydrate & energetics; enzyme; absence of intestinal disaccharidases); Svizhenko 1983 (Biological sonar; analysis of spectral characteristics of sound signals); Urmanov 1971 (Special topic; angioarchitectonics of the liver with reference to gall-excretion system); Versaggi 1975 (Haematology; mineral; intraosseous architechure; relation to acid-base homeostasis); Zoological Society of London 1978 (Care; captivity).

Neophoca cinerea (Peron, 1816) (Australian sea lion)

Cargill et al. 1979 (Care; haematology; blood plasma constituents (17) change with age & sex); Cleland & Southcott 1969 (Product; vitamin; illness from eating liver); Guiler 1978 (Special topic; strandings); Needham 1980 (Special topic; care; restraint & capture cage); Needham et al.

1980 (Haematology; erythrocyte & leukocyte counts; neutrophil-lymphocytes ratio; eosinophil); Southcott 1982 (Vitamin; vitamin A content in liver).

Neophoca hookeri Gray, 1844 (New Zealand or Hooker's sea lion)

Fall 1975 (Food; food cycle; eat spider crab).

Otaria byronia (Blainville, 1820) (southern sea lion; South American sea lion)

Bartlett 1865 (Food; food habits); Geraci 1968 (Nutrition; vitamin; captivity; thiamine deficiency); Gulliver 1874 (Haematology; measurement of blood red corpuscles); Hahn 1884 (Food; stomach contents, eat galets); Martinez 1980 (Haematology; hematological & serological studies); Zoological Society of London 1978 (Reproduction; care; captivity).

Zalophus californianus (Lesson, 1828) (Californian sea lion)

Ainley et al. 1982 (Food; eat Pacific whiting; central California); Anas 1971 (Toxic compounds; organochlorines); Andreev 1978 (Special topic; structural & functional properties of eye); Antonelis et al. 1981 (Food; late spring & summer prey; San Miguel I.); Arvy 1973 (Endocrinology; adrenal gland; biochemistry); Aurioles et al. 1983 (Special topic; winter migration of subadult male, S. Baja California); Bailey & Ainley 1982 (Food; eat Merluccius productus); Ben Shaul 1962 (Milk & lactation; proximate composition; milk); Berkower et al. 1981 (Myoglobin); Bern & de Roos 1960 (Endocrinology; corticosteroids adrenals incubated in vitro); Bernstein et al. 1981 (Enzyme; carbohydrates & energetics; disaccharidase deficiency; ultrastructure of intestinal brush borders membranes); Bigg 1973 (Special topic; census S. Vancouver I.); Bowes et al. 1973 (Toxic compounds; DDE & PCB in liver & blubber; elevated levels in embryonic death); Braham 1973 (Toxic compounds; Pb), 1974 (Food; islands off coast of San Luis Obispo County, California); Briggs & Davis 1972 (Food; eat salmon; Monterey Bay, California); Brookes et al. 1969 (Care; in vitro chlorpromazine metabolism in hepatic microsomes); Brown et al. 1980 (Special topic; metastic adenocarcinoma); Brown & Mayhill 1977 (Enzyme; protein; urea formation in liver; ornithine carbamyl transferase activity; urea synthesis); Brownell & Le Boeuf 1971 (Special topic; mortality natural or artifact); Buhler et al. 1975 (Toxic compounds; Hg, Cd, PCB & DDE in liver & kidney fat); Buhler & Mate 1975 (Toxic compounds; 14 CH_3 Hg & $HgCl_2$); Cargill et al. 1979 (Haematology; care; blood plasma constituents change with age & sex); Castellini et al. 1981 (Carbohydrate & energetics; enzyme; glycolytic enzyme activities in tissues); Cavagnolo 1979 (Haematology; immunology); De Long et al. 1973 (Reproduction; toxic compounds; premature births; PCB, DDT & metabolites in brain, liver & blubber of females & pups); De Master et al. 1982 (Food; eat salmon, herring, squid & shark; fishery interaction); De Roos & Bern 1961 (Endocrinology; corticoids in adrenals; cortisol, corticosterone, 11-dehydrocorticosterone, cortisone & aldosterone); Diamond et al. 1980 (Special topic; edema disease); Dormer et al. 1977 (Haematology; diving; cerebral blood flow during voluntary dives); Druse et al. 1975 (Carbohydrate & energetics; metabolism during swimming); Dyche 1903 (Food; food habits); Ehresmann & Schaffer 1977 (Nucleic acid; RNA snthesized by calicivirus-infected cells), 1979 (Nucleic acid; special topic; calcivirus intracellular RNA); Everitt et al. 1981 (Food; prey items; Puget Sound, Washington); Fiscus & Baines 1966 (Food; food & feeding behaviour); Garibaldi et al. 1979 (Special topic; beachings); Gentry 1981 (Protein; water; sea water drinking; nitrogen excretion in fasting animals); Geraci 1972b (Endocrinology; mineral; hyponatremia, NaCl requirement; ACTH indicates low Na intake), 1974 (Nutrition; vitamin; thiamine deficiency; high blood cell transketolase); Geraci 1981a (Nutrition; care; dietary disorders); Geraci & St. Aubin 1979a (Special topic; stress & disease in marine environment; strandings); Gilmarten et al. 1975 (Toxic compounds; effects of environmental pollutants); Hall 1977 (Food; special topic; nonlethal lavage device for sampling stomach contents); Haslewood 1961 (Lipid; bile salts; allocholic, 3α,7α,12α,23-tetrahydroxycholanic & α-phocaecholic acids); Hemmingsen 1965 (Myoglobin; oxygen transfer); Hochachka et al. 1975 (Carbohydrate & energetics; diving; end-products of anaerobiosis; carbohydrates to pyruvate & lactate; amino acids to succinate); Holden 1978a (Toxic compounds; pollutants); Holmquist et al. 1976 (Haematology; evolution of globulin family; maximum parsimony genetic distances from alpha-hemoglobins & myoglobin phylogenies); Horvath et al. 1968 (Taxonomy & evolution; haematology; respiratory & electrophoretic characteristics of hemoglobin; comparison to other mammals); Johnson 1975 (Bibliography; milk & lactation; carbohydrate & energetics; enzyme; comparative aspects of lactose digestion & synthesis; lactose-metabolizing enzymes in milk & mammary gland; α-lactalbumin; disaccharides; lactose metabolism); Johnson et al. 1972 (Carbohydrate & energetics; enzyme; milk & lactation; nucleic acid; lactose synthetase, galactokinase, uridyl transferase & galactosyl transferase in lactating mammary gland; no lactose; galactose-1-PO_4); Jones 1981 (Food; food habits in N. California); Kelly & Jensen 1960 (Special topic; disease; chronic aortitis); Kooyman & Sinnett 1982 (Diving; pulmonary shunts during simulated dives to depth); Kretchmer & Sunshine 1967 (Carbohydrate & energetics; enzyme; intestinal disaccharidase deficiency); Kruse 1975 (Carbohydrates & energetics; metabolism during swimming); Kruse et al. 1975 (Carbohydrates & energetics; metabolism during swimming); Le Boeuf & Bonnell 1971 (Toxic compounds; DDT in blubber; pathology); Lee et al. 1977a (Mineral; protein; toxic compounds; metallothionein & subcellular localization of Hg & Cd; in nuclear fraction of kidney & liver); Lincoln et al. 1973 (Haematology; taxonomy & evolution; hemoglobin electrophoresis); Lluch Belda 1970 (Nutrition; growth & mortality); Luecke et al. 1975 (Thermoregula-

tion; mathematical biothermal model); Lyall-Watson 1962 (Care; milk & lactation; nutrition; milk analysis & hand-rearing techniques); Martin et al. 1976 (Toxic compounds; minerals; Hg-Se-Br imbalance in premature parturients; Hg, Se, Br, Cd, Ag, Cu, Fe, Zn, Mn, K, Na, Ca & Mg in premature & normal females & pups); Mate et al. 1981 (Anaesthesia; electroimmobilization); Mathai et al. 1966 (Carbohydrate & energetics; enzymes; galactose metabolism; galactose kinase & galactose-1-phosphate transferase); Matsuura 1972 (Thermoregulation); Matsuura & Whittow 1973 (Carbohydrate & energetics; thermoregulation; oxygen uptake during exposure to heat), 1975 (Thermoregulation; thermal insulation during exposure to heat); Medway & Geraci 1978 (Haematology; pathology); Nash & Mach 1971 (Protein; immunoglobin classes (IgG; IgM; IgA), characterization by serologic cross-reactivity; molecular size & binding by human free secretory component); Needham 1980 (Care; special topic; restraint & capture cage); Ohata & Whittow 1974 (Thermoregulation; conductive heat loss to sand); Otten & Andrews 1976 (Nutrition; care; captivity); Otten et al. 1977 (Care; hand-rearing); Palumbo et al. 1971 (Haematology; special topic; blood collection); Patten & Saruba 1979 (Special topic; strandings in Los Angeles & Orange counties); Pauly & Wolfe 1957 (Taxonomy & evolution; haematology; serological relationships among Carnivora); Pilson 1967 (Milk & lactation; milk biochemistry), 1970a (Water; water balance); Pilson & Kelly 1961 (Milk & lactation; carbohydrate & energetics; lipid; protein; composition of milk; glucose, fat, protein, ash & no lactose); Ponganis & Pierce 1978 (Carbohydrate & energetics; enzyme; muscle metabolic profile & fiber-type composition; intermediary glycolysis and oxidation in muscle); Poulter 1965b (Anaesthesia; tranquilizing & anaesthesizing experiments with 500 pound bull); Prato et al. 1974 (Special topic; serological evidence for calicivirus transmission between terrestrial & marine mammals); Puppione 1969 (Haematology; lipid; protein; physical & chemical characterization of serum lipoproteins); Puppione & Nichols 1970 (Haematology; lipid; protein; characterization of chemical & physical properties of serum lipoproteins); Repenning 1976 (Taxonomy & evolution; adaptive evolution), Ridgway & Simpson 1969 (Special topic; anaesthesia; anaesthesia & restraint); Rigdon & Drager 1955 (Nutrition; vitamin; thiamine deficiency); Rathgeb & Gurd 1978 (Haematology; physical methods for study of myoglobin); Sarich 1969a (Taxonomy & evolution; haematology; pinniped origins & rate of evolution); Scheffer & Neff 1948 (Food); Schusterman & Gentry 1971 (Special topic; lipid; development of fatted male phenomena); Shire et al. 1975 (Myoglobin; electrostatic effects in myoglobin); Simon et al. 1974 (Diving; carbohydrate & energetics; biochemical basis for differences in diving times); Smith et al. 1976 (Haematology; special topic; 4 serotypes of San Miguel sea lion virus serum), 1979a (Haematology; erythrocyte deformability); South et al. 1976 (Thermoregulation; air temperature & direct partitional calorimetry); Stone et al. 1973 (Special topic; haematology; diving; renal blood flow in a diving trained seal); Straughan 1972 (Toxic compounds; biological effects of oil pollution; Santa Barbara channel); Stromberg et al. 1980 (Nutrition; nucleic acid; growth potential of cells; SV 40 early region DNA); Stroud & Roffe 1979 (Special topic; causes of death in stranded, Oregon); Stroud & Stevens 1980 (Special topic; lymphosarcoma); Sunshine & Kretchmer 1964 (Carbohydrate & energetics; enzyme; absence of intestinal disaccharidases); Sweeney 1977 (Care; intratacheal injection of antibiotics; Cephaloridine); Thompson 1978 (Special topic; California marine mammals center); Trillmich & Wiesner 1979 (Anaesthesia; immobilization); Van Forest 1978 (Care; reproduction; experiences & problems); Versaggi 1975 (Haematology; mineral; relation to acid-base homeostasis; intraosseous architecture); Vigna et al. 1974 (Myoglobin; structure of polypeptide chain); Whittow et al. 1972 (Thermoregulation), 1975 (Thermoregulation; physiological & behavioural temperature regulation); Wilke & Kenyon 1952 (Food; notes on food); Woodhouse et al. 1979 (Special topic; strandings; Santa Barbara channel region); Zoological Society of London 1978 (Care; reproduction; captivity).

Phocoidea; Phocidae; Cystophorinae

Cystophora cristata (Erxleben, 1777) (hooded seal; bladdernose seal)

Addison et al. 1972 (Toxic compounds; DDT, PCB & dieldrin in oils); Anonymous 1982 (Special topic; report on meeting of ad hoc working group; N.W. Atlantic); Arnason 1981 (Taxonomy & evolution; localization of nucleolar organizing regions on karotypes); Belov 1969 (Milk & lactation; microstructure of lactating gland); Ben Shaul 1962 (Milk & lactation; proximate composition; milk); Birchard et al. 1978 (Toxic compounds; effects of an oil spill); Blix & From 1971 (Carbohydrate & energetics; diving; isozymes of lactate dehydrogenase in brain, head, heart & skeletal muscle of diving); Blix et al. 1973a (Care; food; nutrition; feeding & health); Blix & Steen 1979 (Thermoregulation; newborn; review); Borisov 1969b (Taxonomy & evolution; haematology; protein; antigenic properties of serum proteins); Born 1982 (Reproduction; reproduction in females; S. Greenland); Burns & Gavin 1980 (Special topic; recent records; W. Beaufort Sea); Clausen 1975 (Toxic compounds; polychlorinated hydrocarbons in Arctic ecosystems); Clausen & Ersland 1969 (Haematology; carbohydrate & energetics; respiratory properties of blood); Fairley 1972 (Bibliography; Ireland); Haigh & Stewart 1979 (Anaesthesia; narcotics; preliminary report); Heu 1977 (Reproduction; nutrition; taxonomy & evolution); Holden 1972 (Toxic compounds; monitoring organochlorine contamination); Homestead et al. 1971 (Special topic; portable instantaneous branding device for permanent identification); Jakobsen 1979 (Special topic; production); Jangaard & Ke 1968 (Lipid; milk & lactation; principal fatty acids in milk & depot fats); Johansen et al. 1980 (Toxic compounds; heavy metals & organochlorine compounds, Greenland); Kapel 1972 (Special topic; age analysis), 1974 (Special topic; age

composition & hunting), 1975 (Special topic; research in hunting); Khuzin & Iablokov 1963 (Milk & lactation; digestive tract functioning during feeding on milk); Koeman et al. 1973a (Toxic compounds; correlation between Hg & Se in the tissues); Mansfield 1967 (Food; Arctic & E. Canada); Moller et al. 1966 (Haematology; taxonomy & evolution; population studies; blood analyses); Morshtyn 1967 (Lipid; proximate composition; technological characteristics); Naevdal 1966 (Haematology; protein; taxonomy & evolution; hemoglobin & serum protein electrophoresis); Oritsland 1975 (Reproduction; sexual maturity & reproduction of exercising bears); Pearce et al. 1973 (Toxic compounds; toxic chemicals; Gulf of St. Lawrence); Petrov & Federov 1967 (Toxic compounds; Sr-90 content in bone); Popov 1960 (Reproduction; sexual maturity); Rodahl 1949b (Vitamin; vitamin A sources in Arctic); Rodahl & Davies 1949 (Vitamin; liver vitamin A content); Scholander 1964 (Diving; handbook on physiology); Scholander et al. 1950 (Thermoregulation; carbohydrate & energetics; adaptation to cold in relation to body temperature; insulation & basal metabolic rate), 1942b (Diving; carbohydrate & energetics; thermoregulation; temperature & metabolism during diving); Sergeant 1976 (Special topic; food; history & present status of populations), 1980 (Toxic compounds; Hg & organochlorine residues in tissues; St. Lawrence estuary); Sergeant & Armstrong 1973 (Toxic compounds; Hg; E. Canada); Sergeant & Hoek 1974 (Special topic; tagging & branding); Shepleva 1963a (Enzyme; secretory function of stomach); Simonsen et al. 1982a (Enzyme; taxonomy & evolution; polymorphism of enzymes in liver & muscle); Sokolov 1967 (Haematology; blood properties; N. Pacific); Wagemann & Muir 1984 (Toxic compounds; heavy metals & organochlorine concentrations).

Mirounga angustirostris (Gill, 1866) (northern elephant seal)

Adams & Osburn 1973 (Haematology; protein; serum proteins of pups & adult females, electrophoresis); Briggs et al. 1975 (Anaesthesia; ketamine immobilization); Cargill et al. 1979 (Care; haematology; plasma biochemical values of clinically normal; varies with age & sex; 17 blood constituents); Costa & Ortiz 1982 (Enzyme; lipid; nutrition; mineral; haematology; carbohydrate & energetics; protein; blood chemistry hemostasis during prolong fasting; serum glucose, urea, creatinine, uric acid, total protein, albumin, globulin, triglyceride, cholesterol, bilirubin, alkaline phosphatase, lactate dehydrogenase & electrolytes); Garibaldi et al. 1979 (Special topic; beachings); Glass & Jenness 1971 (Lipid; milk & lactation; nutrition; constituent of fatty acids of milk fats); Hamilton 1949 (Special topic; weight); Heath et al. 1977 (Thermoregulation; comparison of suckling weaned pups); Homestead et al. 1971 (Special topic; portable instantaneous branding device for permanent identification); Hunter & Madin 1976 (Haematology; lipid; protein; chemical blood values; serum cholesterol, globulin, total protein, BUN & bilirubin); Jennings 1966 (Special topic; tagging program); Jones 1981 (Food; food habits in N. California); Keith et al. 1979 (Carbohydrate & energetics; nutrition; metabolism & regulation (recycling) of glucose), 1980 (Carbohydrate & energetics; intermediary metabolism & bioenergetics), 1981 (Carbohydrates & metabolism; nutrition; kinetic model of fasting metabolism); Kooyman et al. 1972 (Diving; haematology; blood nitrogen tensions during simulated deep dives); Laws 1981 (Reproduction; special topic; biology; Antarctic); Le Boeuf 1971 (Toxic compounds; oil contamination & mortality; Santa Barbara channel oil spill, 1969-1970); Le Boeuf & Ortiz 1977 (Milk & lactation; nutrition; proximate composition); Lincoln et al. 1973 (Haematology; taxonomy & evolution; hemoglobin electrophoresis); Lyall-Watson 1962 (Care; nutrition; milk & lactation; milk analysis; hand-rearing techniques); MacDonald 1981 (Enzymes; increased enzyme activity in rapidly growing pups); Mate et al. 1981 (Anaesthesia; electro immobilization); McGinnis & Southworth 1967 (Thermoregulation; body temperature fluctuations), 1968 (Thermoregulation; body temperature regulations), 1971 (Thermoregulation); McGinnis et al. 1975 (Thermoregulation; nursing & weaned pups); Medway & Geraci 1978 (Haematology; pathology); Nelson 1970 (Haematology; lipid; neutral lipid & phospholipid composition of red blood cells & blood plasma); Ortiz et al. 1978 (Carbohydrate & energetics; water; water & energy flux in pup fasting under natural conditions), 1981 (Milk & lactation; nutrition; milk intake index of parental investment); Patten & Saruba 1979 (Special topic; strandings in Los Angeles & Orange counties); Pernia et al. 1979 (Nutrition; protein; catabolism of protein during fasting), 1980 (Protein; nutrition; urea turnover during prolonged fasting), 1981 (Mineral; nutrition; glomerular filtration rate in fasting weaned pups); Puppione 1978 (Haematology; lipid; protein; serum lipoproteins during alimentary lipemia; electrophoresis of LDL, VLDL, HDL & chylomicrons); Puppione & Coggiola 1966 (Haematology; lipid; protein; serum lipoproteins distribution); Reiter et al. 1978 (Nutrition; transition from weaning to nutritional independence), 1981 (Reproduction; female competition & reproductive successes); Riedman & Ortiz 1979 (Carbohydrate & energetics; milk & lactation; lipid; protein; changes in milk composition during lactation; water, protein, fat, fatty acid composition & reducing sugars); Russell 1969 (Toxic compounds; offshore oil leak); Ryding 1982 (Anaesthesia; ketamine immobilization by remote injection method); Simpson et al. 1970 (Haematology; blood volume & other hematologic values in the young); Straughan 1972 (Toxic compounds; oil pollution in the Santa Barbara channel; biological effect); Stroud & Roffe 1979 (Special topic; strandings, causes of death; Oregon); Thompson 1978 (Special topic; California marine mammal center); Tomilin 1977 (Thermoregulation; peri-, semi- & aquatic mammals); Tsunoo et al. 1967 (Protein; histidine compounds in musculature & brain); Tsuyuki 1957 (Lipid; oils of various blubbers), 1958 (Lipid; component fatty acids of oil); Versaggi 1975 (Mineral; haematology, intraosseous architecture; relation to acid-base homeostasis); White

& Odell 1971 (Thermoregulation; thermoregulatory behavior); Winter & Nunn 1953b (Lipid; component fatty acids in oil; variations & relationships of blubber fat to other seals); Woodhouse et al. 1979 (Special topic; strandings); Zoological Society of London 1978 (Care; reproduction; captivity).

Mirounga leonina (Linnaeus, 1758) (southern elephant seal)

Ananthakrishnan & McDermid 1971 (Haematology; enzyme; 2 possible genetic variants of red cell acid phosphatase); Arvy 1973 (Endocrinology; adrenal glands; biochemistry); Augusteyn et al. 1972 (Protein; carbohydrate & energetics; preliminary structure of cytochrome C); Beck 1956 (Mineral; copper content in liver & blood); Bricteaux-Gregoire et al. 1974 (Enzyme; N-terminal amino acid sequence of trypsinogen); Bryden 1964 (Lipid; thermoregulation; insulating capacity of subcutaneous fat), 1967 (Nutrition; biology; development & growth), 1968a (Nutrition; growth & development), 1968b (Milk & lactation; nutrition; lactation & suckling in relation to early growth), 1968c (Lipid; nutrition; thermoregulation; growth & function of subcutaneous fat), 1969a (Nutrition; regulation of relative growth by functional demand; animal production), 1969b (Nutrition; relative growth of major body components), 1969c (Nutrition; growth), 1970 (Product; utilization of meat), 1971 (Nutrition; special topic; size & growth of viscera), 1972 (Special topic; body size & composition; absolute measurements & estimate from bone dimensions); Bryden & Lim 1969 (Diving; haematology; blood parameters in relation to diving); Bryden & Stokes 1968 (Lipid; fatty acid metabolism in blubber of nursing & fasting cows & pups; lipid transfer from cows depot via milk intact to pups); Bullier 1954 (Care; feeding & acclimation in captivity); Carrick et al. 1962 (Special topic; reproduction; annual cycle in relation to age & sex); Cline et al. 1969 (Anaesthesia; haematology; special topic; immobilization & collecting blood); Condy 1981a (Nutrition; molting; milk & lactation; postnatal development & growth; Marion I., Antarctica); Eadie & Kirk 1952 (Haematology; mineral; Na & K concentration in blood cells & plasma); Erickson & Hofman 1974 (Bibliography; special topic; distribution & behaviour); Gibbney 1953 (Reproduction; delayed implantation); Griffiths et al. 1979 (Endocrinology; summer & winter cycles in plasma melatonin levels; pineal cycles; immature males have marked circadian cycles in winter which changed during the summer); Guiler 1978 (Special topic; strandings; Tasmania); Kerry & Messer 1968 (Enzyme; carbohydrate & energetics; milk & lactation; nucleic acid; haematology; intestinal glycosidases; pancreatic amylase; intestinal lactase; sucrase; trihalase; uridyl transferase; UDP-glucose pyrophosphatase; milk lactase; erythrocyte hexose-1-PO_4); Kloes 1979 (Care; hand rearing; Germany); Kloes & Rahn 1975 (Care; reproduction; care & partially successful breeding; Germany); Lane et al. 1972 (Haematology; haematological study); Laws 1953 (Nutrition; special topic; growth & age), 1953a (Special topic; new method of age determination), 1981 (Reproduction; special topic; biology; Antarctic); Ling 1965a (Molting; hair growth & molting), 1965b (Molting; integument & molting process), 1965c (Special topic; molting; functional significance of sweat glands & sebaceous glands), 1966 (Special topic; molting; skin & hair; facial vibrissae), 1968 (Special topic; molting; skin & hair; morphology of adult integument); Ling & Nicholls 1963 (Anaesthesia; immobilization with succinylcholine chloride); Ling et al. 1967 (Anaesthesia; immobilization with succinylcholine chloride); Ling & Thomas 1967 (Molting; reproduction; nutrition; prenatal & early postnatal development & molting); Lythgoe & Dartnall 1970 (Vitamin; deep sea rhodopsin); McCann 1983 (Nutrition; activity budgets during breeding season); McDermid et al. 1972 (Haematology; nucleic acid; enzyme; protein; carbohydrate & energetics; electrophoresis of plasma & red cell proteins & enzymes; McQuarie I.; phosphoglucomutase, acid phosphatase, phosphohexose isomerase, lactate dehydrogenase, 6-phosphogluconate dehydroganase, adenyl kinase, peptidases, diaphorase esterases, alkaline phosphatase, prealbumin, albumin, hemoglobin, ceruloplasmin, haptaglobins & transferrin); Mori et al. 1966g (Lipid; fatty acid composition of blubber oil); Neugebauer 1967 (Reproduction; breeding, Stuttgart Zoo); Seal et al. 1971a (Taxonomy & evolution; haematology; protein; blood chemistry & protein polymorphisms); Shaughnessy 1974a (Haematology; milk & lactation; nutrition; protein; electrophoretic study of blood & milk proteins); Spearman 1968 (Special topic; molting; histological examination of epidermis during telogen stage of hair growth); Tsuyuki & Itoh 1966 (Lipid; oils in blubbers); Tsuyuki & Shingo 1967 (Lipid; studies of oil in blubber); Winter & Nunn 1950a (Lipid; component fatty acids of blubber oil), 1950b (Lipid; component fatty acids in blubber oil; distribution in bodies of mature males and females, nonpregnant females & female pups); Zoological Society of London 1978 (Reproduction; care; captivity).

Mirounga sp.

Guy et al. 1976 (Enzyme; protein; activation peptide of trypsinogen); Smith et al. 1979a (Haematology; erythrocyte deformability).

Phocoidea; Phocidae; Monachinae

Hydrurga leptonyx (Blainville, 1820) (leopard seal)

Andreev 1978 (Special topic; structural & functional properties of the eye); Bechervaise 1962 (Special topic; not for branding); Cleland & Southcott 1969 (Product; vitamin; illness from eating liver; Australian waters); Erickson & Hofman 1974 (Bibliography; special topic; distribution & behaviour); George & Frear 1966 (Toxic compounds; pesticides; Antarctica); Guiler 1978 (Special topic; strandings); Haslewood 1961 (Lipid; bile salts; α-phocaecholic acid, allocholic acid & $3\alpha,7\alpha,12\alpha,23$-tetrahydroxycholanic acid); Kandinski 1974 (Haematology; viscosity, specific weight & hematocrit of blood; Antarctic); Kooyman 1981 (Care; nutrition; reproduction; taxonomy & evolution; hand

book); Laws 1981 (Reproduction; special topic; biology; Antarctic); Oritsland 1977a (Food; food consumption, Antarctic); Reid 1976 (Special topic; care; handling in captivity); Risebrough et al. 1976 (Toxic compounds; food; transfer of PCB to Antarctic; eat penguins containing p,p'-DDE, p,p'-DDT & PCB); Sinha 1976 (Reproduction; regression of Leydig cells & testosterone levels during the nonbreeding season); Siniff et al. 1981 (Special topic; aspects, Antarctic Peninsula); Stone & Siniff 1981 (Food); Winter & Nunn 1950c (Lipid; composition of blubber fat), 1953b (Lipid; component fatty acids of oil; variations & relationship of blubber fat to other seals); Wagemann & Muir 1984 (Toxic compounds; organochlorine & heavy metal concentrations).

Leptonychotes weddelli (Lesson, 1826) (Weddell seal)

Bertram 1940 (Special topic; biology comparative behavior); Blix & Steen 1979 (Thermoregulation; newborn; review); Borruel et al. 1973 (Endocrinology; taxonomy & evolution; biosynthesis of esteroids by suprarenal gland; evolutionary & ecological corticosteroids; pregnenolone, progesterone, corticosterone & 18-hydroxycorticosterone in adrenal cortical slices); Brewerton 1969 (Toxic compounds; DDT in fats); Calhaem & Christoffel 1969 (Food; feeding habits; eat Dissostichus mawsoni; McMurdo Sound, Antarctica); Cannata & Tramezzani 1971 (Endocrinology; neurohypophysis; electron microscope study); Castellini 1979 (Diving; enzyme; enzymatic profile); Castellini et al. 1981 (Carbohydrate & energetics; enzyme; glycolytic enzyme activities; lactate dehydrogenase & pyruvate kinase); Clarke & MacLeod 1982 (Food; stomach contents; eat cephalopods, fish, krill, amphipods & algae); Cline et al. 1969 (Anaesthesia; special topic; haematology; immobilizing & collecting blood); Croxall & Hiby 1983 (Food; special topic; Signy I. & South Orkney I.; Antarctic; fecundity & survival); Davis et al. 1983 (Mineral; diving; renal filtration rate & hepatic blood flow in voluntary diving); Dearborn 1965 (Food; McMurdo Sound, Antarctica); De Master 1978 (Special topic; estimation & analysis of factors that control populations in McMurdo Sound, Antarctica); Domasco et al. 1975 (Endocrinology; steroids in suprarenal cortex); Elsner et al. 1970 (Diving; cerebral tolerance of hypoxemia in asphyxiated), 1977a (Thermoregulation; temperature regulation in newborn); Erickson & Hofman 1974 (Bibliography; special topic; distribution & behaviour); Flyger et al. 1965 (Anaesthesia; effects of 3 immobilizing drugs); Fried et al. 1965 (Enzyme; shunt mechanism enzymes in tissues), 1967 (Enzyme; lipid; α-glycerophosphate dehydrogenase & α-glucose-6-phosphate dehydrogenase; neutral lipids in adipose assembled from exogeneous sources); George & Frear 1966 (Toxic compounds; pesticides, Antarctica); Glass et al. 1967 (Nutrition; lipid; milk & lactation; constituent fatty acid of milk fats); Hammond et al. 1971 (Thermoregulation), 1972 (Thermoregulation; temperature regulation & related studies); Hammond & Elsner 1971 (Special topic; transportation of seals from Antarctic to temperate climate); Hammond et al. 1970 (Thermoregulation; thermal regulation in newborn); Hidka & Tatsukawa 1981 (Toxic compounds; chlorinated hydrocarbons; Antarctic); Hockachka et al. 1977 (Carbohydrate & energetics; diving; pulmonary metabolism during diving; conditioning blood for brain), 1979 (Carbohydrate & energetics; haematology; nutrition; unusual maternal-fetal blood glucose concentration during resting & fasting); Hsu & Coe 1971 (Special topic; mummified; survival of biochemical constituents); Kandinski 1974 (Haematology; viscosity, specific weight & hematocrit of blood; Antarctic); Kerem et al. 1973 (Carbohydrate & energetics; diving; tissue glycogen levels; skeletal muscle, heart, brain & cortex of fetal, month-old & adult; possible adaptation to asphaxial hypoxia); Kooyman 1968 (Diving; analysis of behavioral & physiological characteristics related to diving); Kooyman et al. 1981 (Special topic; diving; late summer dives), 1981a (Diving; taxonomy & evolution; thermoregulation; reproduction; handbook); Kooyman & Drabek 1968 (Haematology; milk & lactation; mineral; milk, blood & urine constituents); Kooyman et al. 1971 (Diving; pulmonary function in free-diving), 1972 (Haematology; diving; blood nitrogen tensions during simulated deep dives), 1978 (Haematology; diving; blood chemistry of free-diving), 1980 (Diving; haematology; carbohydrate & energetics; aerobic & anaerobic metabolism during voluntary diving; preferred pathways from blood chemistry; hemoglobin concentration; lactic acid, glucose & gases), 1983 (Diving; carbohydrate & energetics; aerobic diving limits; lactic acid & O_2 stores; body size); Lantos & Bourrel 1973 (Endocrinology; lipid; biosynthesis of adrenal corticosteroids; endogenous pregnenolone, progesterone, corticosterone, 18-hydroxycorticosterone, aldosterone & cholesterol esters), 1974 (Endocrinology; radioactive corticosteroids); Lenfant et al. 1969 (Diving; haematology; respiratory function of blood of adult & unborn), 1970 (Diving; haematology; tolerance to sustained hypoxia); Liggins et al. 1979 (Endocrinology; high corticosteroid levels in plasma of adult & unborn; cortisol; corticoid-binding globulin; metabolic clearance rate), 1980 (Carbohydrate & energetics; diving; fetal cardiovascular & metabolic responses to simulated diving; maternal & fetal lactate); Lythgoe & Dartnall 1970 (Vitamin; deep sea rhodopsin); Mansfield 1958a (Reproduction; breeding behavior & reproductive cycle); Margni et al. 1971 (Haematology; protein; lipid; carbohydrate & energetics; seroproteins, glycoproteins, lipoproteins & immunoglobulins), 1972 (Haematology; protein; lipids; carbohydrate & energetics; serum proteins, glycoproteins & lipoproteins); Marini & Blair 1971 (Proximate composition; special topic; survival of histological structure & biochemical constituents of ancient Antarctic mummies); Murphy et al. 1982 (Diving; haematology; protein; free amino acids in the blood of unborn & mother during rest & diving), 1980 (Carbohydrate & energetics; diving; metabolic activities of heart, lung & brain during diving & recovery; lactate dehydrogenase, lactate & glucose); Murphy & Hochachka

1979 (Diving; metabolism studies of adult & unborn during diving), 1979a (Diving; carbohydrates & energetics; metabolic activity of heart, brain & lungs during simulated diving), 1981 (Enzyme; carbohydrate & energetics; activities of glycolytic & oxidative enzymes in heart, lung & brain of unborn), 1981a (Diving; haematology; protein; free amino acid profiles in blood during diving & recovery); Norris et al. 1974 (Special topic; new tagging & tracking methods); Oritsland 1977a (Food; food consumption in Antarctic ice pack); Parodi 1982 (Lipid; milk & lactation; positional distribution of fatty acids in milk triglycerides); Peak et al. 1971 (Carbohydrate & energetics; enzyme; lactate dehydrogenase isozymes); Pugh 1959 (Haematology; special topic; carbon monoxide content of blood); Puppione 1969 (Haematology; lipid; protein; physical & chemical characterization of serum lipoproteins); Qvist et al. 1981 (Haematology; oxygen equilibrium properties of blood & hemoglobin of unborn & adults); Racadot 1962 (Endocrinology; milk & lactation; reproduction; several cell types of the anterior lobe pituitary during gestation & lactation); Ray & Smith 1968 (Thermoregulation; of pups & adults); Robin et al. 1970 (Diving; haematology; biochemical adaptation to prolonged diving); Seal et al. 1971a (Taxonomy & evolution; protein; haematology; blood chemistry & protein polymorphisms); Shaughnessy 1969 (Taxonomy & evolution; protein; population studies; transferrin polymorphism & population structure); Simon et al. 1974 (Diving; carbohydrate & energetics; biochemical basis for differences in maximal diving time); Siniff et al. 1977 (Special topic; analysis of dynamics of a population); Smith & Hammill 1981 (Special topic; ecology on fast-ice breeding habitat); Stirling 1966a (Special topic; techniques for handling), 1966b (Special topic; seal marking in McMurdo Sound, Antarctic), 1967 (Special topic; population studies), 1969 (Special topic; ecology McMurdo Sound, Antarctic), 1971 (Special topic; population dynamics McMurdo Sound, Antarctic, 1966-1968), 1971a (Special topic; sex ratio of newborn during pupping season), 1977 (Special topic; adaptation to exploit polar fast-ice habitat in presence or absence of land predators); Stull et al. 1967 (Lipids); Tatton & Ruzicka 1967 (Toxic compounds; organochlorine pesticides in Antarctica); Tedman 1983 (Milk & lactation; lipid; ultrastructure morphology of mammary gland; sizes of fat droplets); Tedman & Bryden 1979 (Special topic; mother-pup behaviour, nursing; McMurdo Sound, Antarctica); Tedman et al. 1981 (Milk & lactation; estimate milk intake by tritiated water & Na-22 turnover); Testa et al. 1981 (Reproduction; special topic; population dynamics in E. McMurdo Sound, Antarctica); Thomas & DeMaster 1983 (Milk & lactation; special topic; nutrition; parameters affecting survival of pups to weaning); Thomas et al. 1980 (Special topic; satellite tracking & automatic position/activity monitoring techniques), 1983 (Biological sonar; special topic; analysis of vocalization using underwater playbacks); Van Den Heede et al. 1973 (Carbohydrate & energetics; heart mitochondrial oxidations); Wagemann & Muir 1984 (Toxic compounds; organochlorine & heavy metal concentrations); Weber 1981 (Reproduction; haematology; functional & molecular aspects of hemoglobins from unborn & mother); Wells & Brennan 1979 (Haematology; oxygen equilibrium properties of isolated hemoglobins); Zapol et al. 1979 (Diving; regional blood flow during simulated diving in conscious seals).

Lobodon carcinophagus (Hombron & Jacquinot, 1842) (crabeater seal)

Bertram 1940 (Special topic; biology; comparative behaviour); Bryden & Erickson 1976 (Special topic; tissue & organ size); Cline et al. 1969 (Anaesthesia; haematology; special topic; immobilization & collecting blood); Guiler 1978 (Special topic; strandings); Erickson & Hofman 1974 (Bibliography; special topic; distribution & behavior); Hidka & Tatsukawa 1981 (Toxic compounds; chlorinated hydrocarbons; Antarctic); Kandinski 1974 (Haematology; viscosity, specific weight & hematocrit of blood; Antarctic); Kooyman 1981b (Haematology; taxonomy & evolution; reproduction; care; handbook); Laws 1981 (Reproduction; special topic; biology; Antarctic); Marini & Blair 1971 (Special topic; proximate composition; histological structure & biochemical constituents of Antartic mummies); Naumov & Chekunova 1980 (Food; carbohydrate & energetics; energy requirements; annual consumption of crustaceans); Oritsland 1977a (Food; food consumption, Antarctic); Peel 1975 (Toxic compounds; special topic; organochlorine residues in Antarctic snow); Schneppenheim 1980 (Mineral; toxic compounds; fluoride concentrations in Antarctic); Seal et al. 1971a (Taxonomy & evolution; haematology; protein; blood chemistry & protein polymorphisms), 1971b (Haematology; taxonomy & evolution; enzyme; population studies; biochemical & population genetics; phylogenic & cytological studies); Sinha 1976 (Reproduction; regression of Leydig cells & testosterone levels during non-breeding season); Sladin et al. 1966 (Toxic compounds; food; DDT residues & in their food; penguins); Tatton & Ruzicka 1967 (Toxic compounds; organochlorine pesticides, Antarctica); Tyler 1960 (Haematology; erythrocytes & hemoglobin); Winter & Nunn 1953a (Lipid; composition of blubber fat), 1953b (Lipid; component fatty acids in oil; variation & relationship of blubber fats to other seals).

Monachus monachus (Hermann, 1779) (Mediterranean monk seal)

Greenwood 1979 (Nutrition; care; rearing orphaned).

Monachus schauinslandi (Matschie, 1905) (Hawaiian monk or Laysan monk seal)

Arnason 1977 (Taxonomy & evolution; relationship between 4 principle karotypes); Gilmartin & Morrow 1981 (Special topic; captive maintenance to define cause of mortality); Oritsland 1977a (Food; food consumption, Antarctic); Takei & Leong 1981 (Toxic compounds; p,p'-DDE, PCB & pentachlorophenol in blubber, lung & testes); Whittow 1978 (Thermoregulation); Wirtz 1968

(Reproduction; special topic; reproduction, growth & development & juvenile mortality).

Ommatophoca rossi Gray, 1844 (Ross seal; big-eyed seal)

Bryden & Erickson 1976 (Special topic; body size & composition); Erickson & Hofman 1974 (Bibliography; special topic; distribution & behaviour); Kandinski 1974 (Haematology; viscosity, specific weight & hematocrit of blood; Antarctic); Laws 1981 (Reproduction; special topic; biology; Antarctic); Sinha 1976 (Reproduction; regression of Leydig cells & testosterone levels in non-breeding season).

Phocoidea; Phocidae; Phocinae

Erignathus barbatus (Erxleben, 1777) (bearded seal)

Anbinder 1975 (Taxonomy & evolution; karotypes; taxonomy); Beck & Smith (Special topic; seal finger; unsolved medical problem); Belopolskii 1935a (Lipid; oil); Blix & Steen 1979 (Thermoregulation; newborns; review); Blood 1977 (Toxic compounds; oil spills; Beaufort Sea); Bowes & Jonkel 1975 (Toxic compounds; PCB; food chains; Arctic & subarctic); Bowes & Lewis 1974 (Toxic compounds; PCB, DDT & DDE in liver fat; extraction of pesticides); Burns 1967 (Special topic; general), 1981a (Nutrition; molting; reproduction); Burns & Frost 1979 (Special topic; natural history & ecology); Chapskii 1938 (Food Kara & Barents seas); Clausen 1975 (Toxic compounds; PCB content in Arctic ecosystems); Clausen et al. 1974 (Toxic compounds; lindane, heptachlor epoxide, aldrin, PCB & DDE in adipose); Cleland & Southcott 1969 (Product; vitamin; illness from eating liver); Dolbish 1955 (Vitamin; vitamin A content in liver); Dunbar 1941 (Food; Canadian E. Arctic); Fedoseev 1973 (Special topic; biological description; basis for kill limits; Sea of Okhotsk); Feltz & Fay 1966 (Thermoregulation; thermal requirements in vitro of epidermal cells); Fetcher 1939 (Nutrition; water; water balance); Finley & Evans 1983 (Food; summer diet; Canadian high Arctic; eelpout, Arctic cod, polar cod, clams, cephalopods, anemones, sea cucumber & polychaetes; benthic feeders; weight of food consumed; regional differences in feeding); Freeman & Horne 1972 (Toxic compounds; Hg; Canada); Frost et al. 1979 (Toxic compounds; feeding patterns, trophic relationships & possible effects of offshore petroleum development; Alaskan Beaufort Sea); Gavrilenko 1952 (Vitamin; vitamin A content in liver); Hall 1977 (Special topic; food; non-lethal lavage device for sampling stomach contents); Heu 1977 (Nutrition; reproduction; taxonomy & evolution); Johnson et al. 1966 (Food); Kizevetter 1950 (Proximate composition; product; technical & chemical characteristics); Kosygin 1966 (Special topic; size & weight; Bering Sea), 1971 (Food; feeding in Bering Sea during spring-summer period; E.b. nauticus); Lewis & Lentfer 1967 (Vitamin; vitamin A content of liver); Lowry et al. 1977 (Food; special topic; trophic relationships among ice-inhabiting phocids; Beaufort sea), 1979 (Food; carrying capacity for feeding in Bering & Chukchi seas), 1980a (Food; eat crustaceans & molluscs; Bering & Chukchi seas; trophic interaction with walrus); Matsko & Vitali 1930 (Vitamin; vitamin D in oil); McLaren 1958b (Nutrition; reproduction; growth & reproduction); Moller et al. 1966 (Haematology; taxonomy & evolution; population studies; blood analysis of populations); Naevdal 1966 (Haematology; protein; taxonomy & evolution; hemoglobin & serum protein electrophoresis); Osipova 1976 (Endocrinology; age related histological changes in ovaries; corticosteroids; 17-ketosteroids); Pikharev 1941 (Food; feeding data; Far East); Potelov 1975 (Reproduction; Barents Sea); Ray et al. 1982 (Special topic; past & present distribution, N. Atlantic); Rodahl & Moore 1943 (Vitamin; vitamin A content & toxicity of liver); Smith 1980 (Special topic; eaten by polar bear); Smith & Armstrong 1975 (Toxic compounds; Hg, Inuit food; Holman, N.W.T.), 1978 (Toxic compounds; Hg, Se & CH_3Hg in tissues, liver; change with age); Sokolov 1966 (Haematology; ecolo-functional & age pecularities of red blood); Stromberg et al. 1980 (Nucleic acid; nurition; growth potential of cells; SV 40 early region DNA); Svizhenko 1983 (Biological sonar; analysis of spectral characteristics of sound signals); Urmanov 1971 (Special topic; angioarchitectonics in the liver with reference to gall-excretion system); Versaggi 1975 (Haematology; mineral; intraosseous architecture; relationship to acid-base homeostasis); Vibe 1950 (Food; Thule district, Greenland); Wagemann & Muir 1984 (Toxic compounds; heavy metals & organochlorine concentrations); West et al. 1979a (Lipid; fatty acid composition of blubber; Bering Sea).

Halichoerus grypus (Fabricius, 1791) (gray or Atlantic seal)

Ackman 1966 (Lipid; iodine No. & polyunsaturated fatty acid content); Ackman & Burgher 1963 (Lipid; milk & lactation; component fatty acids of milk); Ackman et al. 1977 (Nutrition; lipid; dam-pup transfer of fatty acids), 1979 (Lipid; nutrition; long-term dietary exposure to docosenoic acids on heart, muscle & blubber; no myocardial lesions); Ackman & Hooper 1968 (Lipid; milk & lactation; isoprenoid fatty acids; 4,8,12-trimethyltridecanoic acid; LDD & DDD diastereomers of pristanic acid and phytanic acid), 1974 (Lipid; long-chain monoethylenic & other fatty acids of heart, liver & blubber lipids); Ackman & Jangaard 1965 (Lipid; milk & lactation; fatty acid composition of blubber of lactating female); Addison 1973 (Toxic compounds; DDT, PCB & dieldrin in blubber; Canadian Arctic); Addison & Brodie 1977 (Milk & lactation; toxic compounds; DDT & PCB in maternal blubber, milk & pup blubber; Sable I., N.S.); Alzieu & Dugny 1978 (Toxic compounds; organochlorine compounds, France); Amoroso et al. 1951b (Milk & lactation; nutrition; lactation); Amoroso & Matthews 1951 (Milk & lactation; nutrition; growth from birth to weaning), 1952a (Milk & lactation; reproduction), 1952b (Milk & lactation; reproduction); Anderson et al. 1979 (Special topic; pup mortality & causes); Back-

house & Hewer 1956 (Endocrinology; reproduction; delayed implantation), 1957 (Nutrition; special topic; spring behavior); Bagge 1975 (Toxic compounds; pesticide residues; Baltic; review); Baker et al. 1980 (Care; special topic; pathology); Beare-Rogers 1969 (Lipid; lipoxidase on polyenoic acids in marine oils); Ben Shaul 1962 (Milk & lactation; proximate composition; milk composition); Blanchetot et al. 1983 (Taxonomy & evolution; myoglobin; myoglobin gene; unusually lone globin gene of hemoglobin); Blix et al. 1983 (Haematology; lipid; diving; cardiac output & its distribution through capillaries & at rioventricular shunts in diving); Bock et al. 1968 (Milk & lactation; protein; amino acid composition of milk); Bonner 1972a (Special topic; European waters); Bonner & Fogden 1971 (Haematology; blood typing, electrophoresis); Bonner & Hickling 1971 (Special topic; Farne I., October 1969-1971); Boshier 1977 (Reproduction; corpus luteum; ovimplantation); Bowes & Jonkel 1975 (Toxic compounds; PCB, food chains of Arctic & subarctic); Boyd 1983 (Endocrinology; haematology; milk & lactation; luteal regression follicle growth & concentration of some plasma steroids during lactation; progesterone, estradiol-17β & estrus); Brodie 1979 (Food; carbohydrates & energetics; density dependent feeding & energetics); Burke & Jasperson 1944 (Lipid; component acids of oil); Burton et al. 1975 (Reproduction; special topic; prenatal activities); Caines 1978 (Toxic compounds; heavy metal residues; Farne I.); Cansdale 1970 (Care; handrearing at Skegness Natureland); Cardin & Meara 1953 (Lipids); Coulson & Hickling 1964 (Special topic; reproduction; breeding biology; Farne I., England); Davis & Anderson 1976 (Toxic compounds; reproduction; effects of oil pollution on breeding); Donkin et al. 1977 (Toxic compounds; PCB & total organochlorine compounds in blubber), 1981 (Toxic compounds; PCB, DDT, DDE & dieldrin in blubber of male, female & maternally fed seals; levels change with age; Farne I., England during breeding season); Eaton et al. 1977 (Nutrition; lipid; docosenoic acid; heart pathology); Engelhardt & Ferguson 1980 (Milk & lactation; lipid; mineral; endocrinology; thermoregulation; water; adaptive hormone changes during postnatal period; changes in plasma T_3, T_4, cortisol, aldosterone & Na; milk T_3 & T_4; salt & water balance; enhanced lipolysis); Fairley 1972 (Bibliography; Ireland); Farmer & Roberts 1971 (Special topic; strandings, Isle of Man); Fedak & Anderson 1981 (Carbohydrates & energetics; reproduction; energetics); Fogden 1971 (Reproduction; special topic; mother-young behavior at breeding beaches); Freeman & Horne 1972 (Toxic compounds; Hg; Canada); Freeman et al. 1975a (Toxic compounds; endocrinology; effect of contaminants on steroidogenesis); Geraci 1974 (Haematology; nutrition; vitamin; thiamine deficiency; measure by blood cell transketolase), 1981a (Nutrition; care; dietary disorders); Greenwood et al. 1971 (Haematology; blood values in young); Greenwood & Wild 1977 (Special topic; care; fibreoptic gastroscopy); Harms et al. 1977/1978 (Toxic compounds; Cu, Zn, Cd, Pb; Hg, PCB & DDT in blubber, muscle, liver & brain); Heath 1978 (Haematology; protein; serum protein analysis); Helle et al. 1976c (Toxic compounds; endocrinology; environmental poisons; Baltic Sea); Heppleston 1973 (Toxic compounds; PCB, DDT & dieldrin in blubber, liver & kidney of suckling pups & mothers; variation with age); Heppleston & French 1973a (Toxic compounds; Hg & other metals; U.K.); Heu 1977 (Nutrition; reproduction; taxonomy & evolution); Hewer 1964 (Reproduction; fetal seal growth rate; implantation & female cycle), 1964a (Special topic; reproduction; determination of age, sexual maturity & longevity; life table); Hewer & Backhouse 1968 (Reproduction; embryology & fetal growth); Hilditch & Pathak 1947 (Lipid; component fatty acids; low-temperature crystallization; free fatty acids; unsaponifiable matter & iodine No. of liver & blubber oil), 1949 (Lipid; component acids of blubber & liver fat); Holden 1969 (Toxic compounds; organochlorine residues), 1971a (Toxic compounds; organochlorine residues; North Sea), 1972 (Toxic compounds; monitoring organochlorine contamination), 1975 (Toxic compounds; accumulation of oceanic contaminants; DDT, PCB, dieldrin & Hg in blubber & other tissues), 1978 (Toxic compounds; organochlorine residues; Farne I.), 1978a (Toxic compounds; pollutants); Holden & Marsden 1967 (Toxic compounds; DDT & dieldrin in liver, brain & blubber); Janssen et al. 1979 (Toxic compounds; chlorinated terpenes & chlordane compounds; Swedish waters); Jensen & Jansson 1976a (Toxic compounds; anthropogenic substances from the Baltic; sulfone metabolites of PCB's & DDE); Jensen et al. 1969 (Toxic compounds; DDT & PCB; Swedish waters); Jewell & Smith 1965 (Anaesthesia; immobilization); Koeman et al. 1973a (Toxic compounds; correlation between Hg & Se in tissues); Lapennas & Reeves 1982 (Carbohydrate & energetics; haematology; respiratory properties of the blood; anaerobic metabolism); Lavigne & Ronald 1975 (Vitamin; visual pigments); Lincoln et al. 1973 (Haematology; taxonomy & evolution; hemoglobin electrophoresis); Ling & Button 1975 (Molting; integument, fetal & neonatal molting; skin & pelage); Mansfield 1977 (Nutrition; special topic; growth & longevity; E. Canada); Mansfield & Beck 1977 (Special topic; E. Canada); Matthews 1950a (Milk & lactation; process of lactation during September & October), 1950b (Milk & lactation; special topic; natural history including lactation); Mawdesley-Thomas & Bonner 1970 (Special topic; uterine tumors); McDermid & Bonner 1975 (Carbohydrate & energetics; enzyme; haematology; nucleic acid; protein; red cell & serum protein system; hemopexin system; electrophoresis of enzymes and hemoglobin; peptidase C, phosphoglucomutase, nucleoside phosphorylase & adenylate kinase); McKie et al. 1980 (Toxic compounds; heavy metals from E. coast of Scotland); Meara 1952 (Milk & lactation; lipid; component fatty acids of milk fat); Medway & Geraci 1978 (Haematology; pathology); Nelson 1971 (Lipid; haematology; lipid composition of blood; red blood cell & serum phospholipids (PC, PS, SPH) & glycosphingolipids); Ohata & Whittow 1974 (Thermoregulation; conductive heat loss to sand); Olafson & Thompson 1974 (Mineral; protein; toxic compounds; isolation of heavy metal binding

proteins; metallothionein of Cu & Cd); Olsson 1978 (Toxic compounds; reproduction; PCB in Baltic); Parry et al. 1981 (Anaesthesia; chemical immobilization by 8 drugs); Pearce et al. 1973 (Toxic compounds; toxic chemicals, Gulf of St. Lawrence); Rae 1963 (Food); Rappe et al. 1981 (Toxic compounds; polychlorinated dibenzofurans identified in environmental samples); Reichenow 1839 (Bibliography; captivity); Reijnders & Wolff 1981 (Special topic; life history; population dynamics & disease); Renberg et al. 1978 (Toxic compounds; polychlorinated terpenes; Sweden); Rezvov 1977 (Food; Baltic Sea); Rodahl & Davies 1949 (Vitamin; vitamin A content in liver); Sangalang & Freeman 1976 (Endocrinology; steroids in plasma of adults; cortisol, cortisone, corticosterone, aldosterone, testosterone & 11-deoxycorticosterone content); Scholander 1964 (Diving; handbook of physiology); Scholander et al. 1942b (Diving; thermoregulation; temperature & metabolism during diving); Sergeant & Armstrong 1973 (Toxic compounds; Hg; E. Canada); Siversten & Bjorge 1980 (Food; Helgeland, Norway); Smith 1966a (Food), 1966b (Special topic; mother-young relations), 1968 (Special topic; adaptive suckling); Spotte & Stake 1982 (Care; nutrition; hand-rearing from birth to weaning); Stake & Spotte 1982 (Carbohydrate & energetics; nutrition; estimate of maintenance energy requirements from birth to weaning); Stalling et al. 1982 (Toxic compounds; polychlorinated dibenzofurans, PCB, polychlorinted dibenzo-p-dioxans); St. Aubin & Geraci 1977 (Enzyme; protein; tissue distribution & plasma levels of liver enzymes; alanine aminotransferase, aspartate aminotransferase, ornithine carbamyl transferase & sorbitol dehydrogenase; species & tissue differences in activity), 1980 (Vitamin; vitamin C levels in epidermis, adrenals, liver & muscle); Thompson & Hickling 1973 (Bibliography; literature of the Farne I., England); van de Ven et al. 1979 (Toxic compounds; Hg, Se & CH_3Hg in liver, kidney, brain, blood & thyroid in captive & wild); Watt 1952 (Special topic; experiments in marking); Wagemann & Muir 1984 (Toxic compounds; heavy metals & organochlorine concentrations); Winter & Nunn 1953b (Lipid; component fatty acids in blubber oil; relationship & variations of blubber fats to other seals); Yoshida & Nakamura 1977 (Toxic compounds; PCB methylsulfones in blubber); Zoological Society of London 1978 (Reproduction; care; captivity).

Histriophoca fasciata (Zimmerman, 1783) (ribbon, harnessed, saddled or banded seal)

Anbinder 1975a (Taxonomy & evolution; karotypes); 1977 (Taxonomy & evolution; relationships between 4 principle karotypes), Arnason 1981 (Taxonomy & evolution; localization of nucleolar organizing regions of karotypes); Arseniev 1940 (Food; food habits); Borisov 1966a (Taxonomy & evolution; haematology; protein; antigenic properties of serum proteins); Burns 1981 (Taxonomy & evolution; reproduction; nutrition; molting; handbook); Frost & Lowry 1980 (Food; spring feeding; eat pollack, Arctic cod & eel; Bering Sea); Hall 1977 (Nutrition; special topic; nonlethal lavage device for sampling & stomach contents); Hamanaka et al. 1977 (Toxic compounds; Cd; Zn; Okhotsk Sea); Heu 1977 (Taxonomy & evolution; nutrition; reproduction); Kizevetter 1950 (Proximate composition; product; technical & chemical characteristics); Krogh & Iversen 1968a (Thermoregulation; comparison of temperature gradients in limbs & blubber, Arctic), 1968b (Carbohydrate & energetics; thermoregulation; metabolism); Lenfant & Johansen 1968 (Haematology; morphological & chemical properties of blood); Lincoln et al. 1973 (Haematology; taxonomy & evolution; hemoglobin electrophoresis); Parchevskii et al. 1973 (Toxic compounds; logarithmically normal distribution of Sr-90 concentrations in bones & muscles; Sea of Okhotsk; Bering Sea); Shustov 1965 (Food; feeding habits in Bering Sea); Sokolov 1966 (Haematology; ecolo-functional & age pecularities of red blood), 1967 (Haematology; blood properties; N. Pacific); Urmanov 1971 (Special topic; angioarchitectonics in liver with reference to gall-excretion system); Wagemann & Muir 1984 (Toxic compounds; heavy metals & organochlorine concentrations); West et al. 1979a (Lipid; fatty acid composition of blubber; Bering Sea).

Pagophilus groenlandicus (Erxleben, 1777) (harp or Greenland seal)

Ackman et al. 1963 (Lipid; systematic identification of fatty acids by GLC), 1979 (Lipid; nutrition; long-term dietary exposure of docosenoic on heart, muscle & blubber composition of dam-pup; no myocardial lesions), 1971c (Lipid; fatty acid composition of blubber fat); Ackman & Hooper 1968 (Lipid; milk & lactation; isoprenoid fatty acids; 4,8,12-trimethyltridecanoic acid; phytanic acid; LDD- & DDD-diastereomers of pristanic acid); Ackman et al. 1974 (Lipid; fatty acids of depot & other organ fats; can detect food-chain?); Ackman & Sipos 1965 (Lipid; saturated fatty acids with reference to normal odd-numbered fatty acids & branched-chain fatty acids); Addison 1973 (Toxic compounds; DDT, PCB & dieldrin in blubber; Canadian Arctic); Addison et al. 1973 (Toxic compounds; DDT & metabolites & PCB levels in blubber; vary with age), 1972 (Toxic compounds; DDT, PCB & dieldrin in oils); Allen 1975 (Special topic; life table; N.W. Atlantic); Anbinder 1975a (Taxonomy & evolution; karotypes); Anders et al. 1967 (Food; E. coast, Baffin I.); Anonymous 1982 (Special topic; report on meeting of ad hoc working group; N.W. Atlantic); Austin 1976 (Haematology; enzymes; tissue distribution & plasma levels of 4 clinical enzymes); Austin & Geraci 1981 (Care; enzyme; haematology; plasma & tissue activities of enzymes; creatine kinase, aldolase, γ-glutamyltransferase & leucine amino peptidase; clinical applications); Bailey et al. 1980 (Carbohydrate & energetics; lipid; milk & lactation; neonatal changes in tissue levels of carbohydrate & lipid; triglyceride content in pup blubber during nursing & fasting), 1981 (Lipid; haematology; changes in fatty acid composition of plasma during post-weaning fast); Baker & Lauer 1971 (Carbohydrate & energetics; milk & lactation; carbohydrate (sialic acid; hexose;

hexosamine) content of casein); Baker et al. 1970 (Toxic compounds; milk & lactation; Sr-190 & Cs-137 in milk; Alaska); Belov 1969 (Milk & lactation; reproduction; microstructure of lactating gland); Ben Shaul 1962 (Milk & lactation; proximate composition; milk); Blacker 1968 (Food; pelagic fishes; Arctic & adjacent waters); Blix et al. 1979 (Thermoregulation; temperature regulation in newborn & pups; thermogenic adipose), 1973a (Care; food; nutrition; feeding & health of young); Blix & Steen 1979 (Thermoregulation; newborn; review); Borisov 1966a (Haematology; protein; serological analysis); Botta et al. 1982 (Proximate composition; product; carcass meat; effect of sex and age), 1982a (Product; molting; proximate composition; meat), 1983 (Toxic compounds; total Hg in meat & liver; Newfoundland), 1980 (Product; sensory quality of frozen, stored, salted & smoked); Bowen 1982 (Special topic; age structure of catch, 1952-1980); Bowen et al. 1981 (Reproduction; temporal changes in reproduction; potential of females), 1983 (Special topic; age estimation using dentinal annulli); Bowen & Sergeant 1983 (Special topic; mark-recapture estimates of populations, N.W. Atlantic); Bowes & Jonkel 1975 (Toxic compounds; PCB; food chains in Arctic & subarctic); Brockerhoff 1966 (Lipid; fatty acid distribution in depot fats); Brockerhoff & Ackman 1967 (Lipid; positional distribution of isomers of monoenoic fatty acids in glycerolipids in depot fat); Brockerhoff & Hoyle 1963 (Lipid; structure of depot fats; triglycerides); Brockerhoff et al. 1968 (Lipid; positional distribution of fatty acids in depot triglycerides); Brocklesby 1941 (Lipid; product; chemistry & technology of oil; Canada); Chapskii 1965c (Milk & lactation; nutrition; initial stages of postnatal development; White Sea); Chekumova 1963 (Molting; peculiarities of histological structure of skin & its fat connective tissues); Cocivera 1971 (Diving; physiological characteristics; scientific mystery); Comeau 1923 (Food; special topic; general; lower St. Lawrence Gulf, Quebec); Cook & Baker 1969 (Milk & lactation; proximate composition; toxic compounds; pesticide residues content; milk); Degerbol & Freuchen 1935 (Food; report of 5th Thule Expedition, 1921-1924); Dunbar 1949 (Food; Arctic & subarctic); Eaton et al. 1977 (Lipid; reproduction; nutrition; docosenoic acid; heart); Engelhardt 1974 (Nutrition; vitamin; aspects of vitamin E deprivation), 1977a (Nutrition; vitamin; plasma & tissue levels of dl-α-tocopherol), 1977b (Anaesthesia; immobilization by intravenous injection of ketamine), 1977c (Haematology; blood changes from newborn to adult); Engelhardt & Ferguson 1980 (Endocrinology; milk & lactaton; mineral, water; thermoregulation; adaptive hormone changes during postnatal period; changes in plasma T_3, T_4, cortisol, aldosterone & Na, in milk T_3 & T_4 & in salt & water balance); Engelhardt & Geraci 1975 (Vitamin; nutrition; uptake & distribution of tocopherols), 1978 (mineral; molting; vitamin; nutrition; vitamin E deprivation on Na, electrolytes & molting patterns); Engelhardt et al. 1975 (Vitamin; nutrition; tocopherol distribution on skeletal muscle & blubber); Engelhardt & Walker 1973 (Lipid; fatty acid composition in blubber, liver, muscle, heart, aorta, brain & testes); Fairley 1972 (Bibliography; Ireland); Finley & Gibb In Press (Food; summer diet & feeding behavior; Canadian high Arctic); Fisher 1954a (Reproduction; studies in N.E. Atlantic), 1954b (Reproduction; N.E. Atlantic); Frank et al. 1973 (Toxic compounds; organochlorine residues; E. Canada); Freeman et al. 1975 (Endocrinology; toxic compounds; CH_3Hg on steroidogenesis *in vitro* with & without CH_3Hg treatment *in vivo*; cortisol, corticosterone & 4-androstene-3,17-dione in liver, kidney & spleen), 1975a (Toxic compounds; endocrinology; effects of contaminants on steroidogenesis); Frisch & Oritsland 1968 (Molting; thermoregulation; insulative changes in pups during molting); Gallivan 1977 (Thermoregulation; diving; temperature regulation & respiration in free swimming); Gallivan & Ronald 1979 (Thermoregulation; diving; temperature regulation in freely diving), 1981 (Carbohydrate & energetics; apparent specific dynamic action); George et al. 1971 (Special topic; histophysiological study of certain skeletal muscles); George & Ronald 1973 (Carbohydrate & energetics; ultrastructure & metabolic adaptation of skeletal muscle), 1975 (Carbohydrate & energetics; diving; lipid; metabolic adaptation of skeletal muscle; carbohydrate metabolism, energy from glycogen in diving; intracellular lipid droplets); Geraci 1970 (Haematology; nutrition; vitamin; effect of fish-induced thiamine deficiency), 1971 (Haematology; functional haematology), 1972a (Nutrition; vitamin; experimental thiamine deficiency by feeding herring & smelt), 1972b (Endocrinology; mineral; hyponatremia & need for NaCl supplementation in captivity; ACTH indicates level), 1974 (Vitamin; nutrition; thiamine deficiency; high blood cell transketolase), 1981a (Nutrition; care; dietary disorders); Geraci & Engelhardt 1974 (Haematology; special topic; effects of storage time, temperature & anticoagulants on blood; simulated study); Geraci & Smith 1977a (Toxic compounds; behavior & pathophysiology of exposure to crude oil), 1977 (Toxic compounds; oil fouling; consequences); Glass & Jenness 1971 (Milk & lactation; lipid; constituent fatty acids of milk fat); Glazova 1972 (Haematology; physiological-biochemical characteristics of blood), 1977 (Haematology; protein; physiological & biochemical blood indices; electrophoresis of blood hemoglobin & heart & muscle myoglobins; serum, 5-8 fractions; hemoglobin concentration); Grav & Blix 1976 (Thermoregulation; thermogenically-active mitochondria in brown adipose of pups); Grav 1981 (Thermoregulation; cellular thermogenesis in brown adipose of newborn; role of mitochondrial respiration & coupling processes & chemeosmosis in thermogenesis of brown adipose); Heu 1977 (Taxonomy & evolution; reproduction); Holden 1971b (Toxic compounds; organochlorine residues in pups), 1972 (Toxic compounds; monitoring organochlorine contamination), 1975 (Toxic compounds; accumulation of oceanic contaminants; DDT, dieldrin, PCB & Hg in blubber & other tissues), 1978a (Toxic compounds; pollutants); Holden & Marsden 1967 (Toxic compounds; DDT & dieldrin in liver, brain & blubber); Innes 1981 (Nutrition; growth; N.W. Atlantic); Irving

drate & energetics; thermoregulation; metabolism & insulation in cold water); Jangaard & Ke 1968 (Lipid; milk & lactation; principal fatty acids in depot fat & milk lipids); Johanson et al. 1980 (Toxic compounds; heavy metals & organochlorines; Greenland); John et al. 1980 (Endocrinology; lipid; plasma growth hormones & free fatty acids; seasonal changes; pup post-natal growth); Jones et al. 1975 (Toxic compounds; biocide residues), 1976 (Toxic compounds; milk & lactation; DDT, dieldrin, PCB & Hg residues in liver, kidney, brain & blubber of male, female, neonatal & lactating adult); Keiver & Ronald 1981 (Carbohydrates & energetics; special topic; digestible energy); Koeman et al. 1973a (Toxic compounds; correlation between Hg & Se in tissues); Lauer & Baker 1977 (Milk & lactation; protein; amino acid composition of casein); Lavigne & Ronald 1975 (Vitamin; visual pigments); Lavigne & Stewart 1979 (Carbohydrate & energetics; energy content of placenta); Lavigne et al. 1978 (Taxonomy & evolution; genetic variability, N.W. Atlantic), 1982 (Carbohydrate & energetics; lipid; proximate composition; milk & lactation; changes in composition & energy content of milk during lactation; lipid & water changes); Leatherland & Ronald 1979 (Reproduction; testes in neonate & adult; structure), 1983 (Endocrinology; identification of mammotropic, somatotropic, luteotropic, folliculotrophic, thyrotrophic & corticotrophic cells in pars distalis neonate, juvenile & adults by immunochemistry); Ling 1965c (Special topic; integument; functional significance of sweat glands & sebaceous glands); Litchfield 1968 (Lipid; predicting the positional distribution of 22:6ω3 & 20:5ω3 in triglycerides); Malins 1977 (Toxic compounds; oil fouling; Arctic & subarctic); Mayzaud & Ackman 1978 (Lipid; 6,9,12,15,18-heneicosapentaenoic acid in oil, 21:5ω3 derived from algae); McDonell 1972 (Anaesthesia); McGrath et al. 1981 (Anaesthesia; upper airway); Medway & Geraci 1978 (Haematology; pathology); Meshcherskii et al. 1980 (Anaesthesia; of newborn with sodium hydroxybutyrate); Moller et al. 1966 (Haematology; taxonomy & evolution; population studies; blood analysis of populations); Morshtyn 1963a (Lipid; physical properties of oil from fats), 1963b (Lipid; product; technology of oil production from fat), 1967 (Lipid; proximate composition; technological characteristics), 1969 (Lipid; product; technology of fat production), 1973 (Lipid; change in thickness & fat content of subcutaneous blubber; integument); Myers 1959 (Food; stomach contents; Magdalen I., Quebec); Naevdal 1965 (Haematology; protein; taxonomy & evolution; protein; polymorphism used in population identifications), 1966 (Haematology; protein; taxonomy & evolution; hemoglobins & serum protein electrophoresis), 1969 (Haematology; protein; taxonomy & evolution; blood protein polymorphisms; E. Canada); Nagy & Ronald 1970 (Special topic; structure of retina); Nazarenko 1975 (Reproduction; sexual maturity, reproductive rate & missed pregnancy of females); Nelson 1970 (Lipid; haematology; lipid composition of blood; neutral lipid & phospholipid composition of erythrocytes & plasma); Nesterov 1973 (Anaesthesia; narcotic drugs & distilline in harvesting), 1973a (Anaesthesia; sleep inducing agents distilline in harvesting); Olsson 1980 (Taxonomy & evolution; content of C-14; N. Europe); Oritsland 1968 (Thermoregulation; variation in body surface temperature), 1971 (Special topic; status of Norwegian studies at Newfoundland), 1971a (Special topic; progress report on Norwegian studies at Newfoundland), 1971b (Thermoregulation; wavelength dependent solar heating); Oritsland et al. 1978 (Thermoregulation; radiative surface temperature); Oritsland & Ronald 1973 (Thermoregulation; effect of solar radiation & wind chill on skin temperature), 1975 (Carbohydrates & energetics; diving; energetics of free diving), 1977 (Thermoregulation; simulation program for heat balance), 1978 (Thermoregulation; aspects of temperature regulation of pups evaluated in vivo experiments and computer simulation), 1978a (Thermoregulation; hair transmittance; solar heating); Osipova 1974 (Lipid; special topic; detection of lipofuscin), 1976 (Endocrinology; age related histological changes in ovaries; corticosteroids; 17-ketosteroids); Pearce et al. 1973 (Toxic compounds; Gulf of St. Lawrence); Petrov 1933 (Special topic; physical-chemical characteristics); Petrov & Federov 1967 (Toxic compounds; Sr-90 content in bone); Ramprashad & Ronald 1977 (Toxic compounds; CH_3Hg on sensory hair-cell population in the cochlea); Rodahl 1949b (Vitamin; vitamin resources in Arctic region); Rodahl & Davies 1949 (Vitamin; liver vitamin A content); Roff & Bowen 1983 (Special topic; population dynamics); Ronald 1967 (Haematology; physical blood properties, aged 1-12 months), 1970 (Haematology; physical blood properties of neonatal & mature), 1975 (Toxic compounds; CH_3Hg toxicity); Ronald et al. 1969 (Haematology; protein; physical properties of blood; electrophoresis of albumin, 11 bands), 1975 (Toxic compounds; effects of CH_3Hg), 1976 (Care; molting; special topic; methods of handling, molt & disease), 1977 (Toxic compounds; CH_3Hg poisoning); Ronald & Tessaro 1976 (Toxic compounds; CH_3Hg poisoning); Rosewell & Baker 1979 (Toxic compounds; organochlorine pesticide residues; methods for residue confirmation); Rosewell et al. 1979 (Toxic compounds; organochlorine residues in tissues; Gulf of St. Lawrence); Samuels et al. 1970 (Toxic compounds; Sr-90 & Cs-137 levels in tissues); Sergeant 1959 (Special topic; sustainable catch; N.W. Atlantic), 1963 (Special topic; sealing industry), 1965 (Special topic; migration; N.W. Atlantic), 1973a (Food; nutrition; special topic; feeding, growth & productivity; N.W. Atlantic), 1976 (Food; special topic; history & present status of populations), 1976a (Special topic; N.W. Atlantic population), 1980 (Toxic compounds; Hg & organochlorine residues in tissues; St. Lawrence estuary); Sergeant & Armstrong 1973 (Toxic compounds; Hg; E. Canada); Sergeant & Fisher 1960 (Special topic; population in N.W. Atlantic, 1950-1960); Sergeant & Hoek 1974 (Special topic; tagging & branding, 1971-1974); Shepeleva 1963a (Enzyme; secretory function of stomach); Simonsen et al. 1982a (Taxonomy & evolution; enzymes; polymorphic

enzymes in liver & muscle; electrophoretic variations); Siversten 1941 (Special topic; biology); St. Aubin et al. 1979 (Care; enzyme; protein; handling & transportation stress on plasma enzymes; plasma creatine kinase, aspartate aminotransferase, aldolase, alanine aminotransferase, γ-glutamyltranspeptidase & leucine aminopeptidase); St. Aubin & Geraci 1977 (Enzyme; protein; tissue distribution & plasma levels of liver enzymes; alanine aminotransferase, aspartate aminotransferase, ornithine carbamyltransferase & sorbitol dehydrogenase; species & tissues differences in activity), 1980 (Vitamin; vitamin C levels in epidermis, adrenals, muscle & liver); Stewart & Lavigne 1979 (Special topic; age determination workshop; N.W. Atlantic), 1980 (Nutrition; neonatal growth; N.W. Atlantic); Stewart et al. 1981 (Reproduction; parturition), 1981a (Nutrition; milk & lactation; energetics of nursing; energy transfer & female condition; N.W. Atlantic), 1983 (Milk & lactation; carbohydrate & energetics; proximate composition; lactose content of milk); Suderman & Yeh-Ku 1971 (Haematology; physicochemical properties of hemoglobin); Suderman et al. 1973 (Haematology; zone electrophoresis & isoelectric focusing of hemoglobin), 1978 (Haematology; heterogeneity & partial sequences of hemoglobins); Tarasoff 1974 (Special topic; thermoregulation; anatomical adaptation); Templeman 1968 (Food; eat capelin; N.W. Atlantic); Tessaro 1975 (Toxic compounds; effects of CH_3Hg; structure of brain); Tessaro & Ronald 1976 (Toxic compounds; CH_3Hg poisoning); Umminger 1975 (Carbohydrates & energetics; body size & whole blood sugar concentrations); Vallayathan et al. 1969 (Enzyme; carbohydrate & energetics; haematology; lipid; levels of hemoglobin iron; certain metabolites & enzymes in blood; hemoglobin, glucose, Fe, cholesterol & lipid levels; amylase, lactate dehydrogenase, aldolase, lipase & esterase activity); Van Horn & Baker 1971 (Milk & lactation; proximate composition; stage of lactation on composition of milk); Wagemann & Muir 1984 (Toxic compounds; organochlorine & heavy metal concentration); Winter & Nunn 1953b (Lipid; component fatty acids in blubber fat; variations & relationship of blubber fat to other seals); Winters 1978 (Special topic; production; mortality & sustainable yield; N.W. Atlantic); Worthy 1981 (Carbohydrates & energetics; nutrition; changes in energy stores during neonatal development), 1981a (Nutrition; proximate composition; body size & composition during the post-weaning period), 1982 (Carbohydrate & energetics; lipid; protein; energy sources during post-weaning period); Worthy & Lavigne 1981 (Nutrition; carbohydrates & energetics; energy utilization during post-weaning period), 1981a (Nutrition; haematology; post-weaning growth), 1981b (Nutrition; haematology; changes in blood properties after weaning; fasting & feeding pups), 1982 (Haematology; enzyme; mineral; protein; changes in blood properties of fasting & feeding after weaning; Ca, alkaline phosphatase, glutamyl pyruvate transaminase & creatine phosphokinase), 1983 (Carbohydrate & energetics; lipid; protein; nutrition; energetics & subsequent growth in weaned pups); Worthy et al. In Press (Nutrition; post-weaning growth).

Phoca kurilensis (Kurile Island seals)

Naito & Nishiwaki 1975 (Food; special topic; ecology & morphology; S. Okhotsk Sea & N.W. Hokkaido).

Phoca largha (Pallas, 1811) (largha seal)

Anonymous 1972 (Taxonomy & evolution; population studies; toxic compounds; toxicology & biochemical analysis of species & populations; adaptation to environment; Bering Sea); Arnason 1981 (Taxonomy & evolution; localization of nucleolar organizing regions in karotypes); Ashwell-Erickson & Elsner 1981 (Carbohydrate & energetics; energy costs of free existence); Ashwell-Erickson & Elsner 1981a (Molting; carbohydrates & energetics; nutrition; energy cost of free existence in Bering Sea); Ashwell-Erickson et al. 1979 (Nutrition; metabolism; Bering Sea), 1981 (Endocrinology; molting; nutrition; nutritional & hormonal aspects of molting; Bering Sea), 1981a (Molting; endocrinology; nutrition endocrine system; nutritional & metabolic aspects of molting); Bigg 1981 (Taxonomy & evolution; diving; molting; reproduction; thermoregulation; care; handbook); Blix et al. 1983 (Haematology; lipid; diving; cardiac output & its distribution through capillaries & rioventricular shunts in diving); Blix & Steen 1979 (Thermoregulation: newborns; review); Kato 1982 (Food; food habits of pups in pack ice area; eat euphausiids, decapods, cephalopods, fish, squid & octopus; Sakhalin, USSR & Hokkaido, Japan); Kostareva et al. 1970 (Toxic compounds; Sr-90, Sr & Ca); Nikolaev & Skalkin 1975 (Food; Sakhalin I.; food habits); Parchevskii et al. 1973 (Toxic compounds; Sr-90 content in bone & muscle); Shaughnessy 1971 (Taxonomy & evolution; biochemical comparison of pagophilic & pagophobic, P.v. largha & P.v. richardi), 1975b (Haematology; taxonomy & evolution; biochemical comparison of P.v. richardi & P.v. largha); Urmanov 1971 (Special topic; angioarchitectonics of liver with reference to gall-excretion system).

Phoca vitulina Linnaeus, 1758 (harbour seal; spotted seal; common seal)

Ackman 1966 (Lipid; iodine No. & polyunsaturated fatty acid content); Ackman & Hooper 1974 (Lipid; long-chain monoethylenic & other fatty acids in heart, liver & blubber lipids); Ackman et al. 1974 (Lipid; fatty acids of depot & other organ fats; can fatty acids be used to detect food chains?), 1972b (Lipid; fatty acid composition in lung & heart phospholipids & triglycerides; P.v. concolor); Alcorn et al. 1980 (Toxic compounds; before & after sewage spill; S. San Francisco Bay); Anas 1974a (Toxic compounds; Hg, Cd, & Pb in unborn & in newborn liver, muscle & kidney; change with age; P.v. richardii), 1974b (Toxic compounds; PCB & DDT in blubber); Anbinder 1975a (Taxonomy & evolution; karotypes); Andreev 1978 (Special topic; structural & functional properties of the eye); Anonymous 1977 (Toxic compounds; heavy metal & organohalogen

investigation; North Sea coast of Germany); Arndt 1973 (Toxic compounds; DDT & PCB levels in 3 populations; Washington State); Arvy 1973 (Endocrinology; adrenal glands; biochemistry); Ashwell-Erickson & Elsner 1981 (Carbohydrate & energetics; energy costs of free existence); Ashwell-Erickson et al. 1979 (Nutrition; metabolism; Bering Sea), 1981a (Molting; nutrition; carbohydrates & energetics; energy cost of free existence in Bering Sea), 1981 (Endocrinology; molting; nutrition; nutritional & hormonal aspects of molting; Bering Sea; P.v. richardii); 1981a (Endocrinology; molting; nutrition; endocrine system; nutritional & metabolic aspects of molting); Bagge 1975 (Toxic compounds; pesticide residues; Baltic; review of selected literature); Bailey 1952 (Lipid; marine oils; Canada); Behrisch & Elsner 1975 (Carbohydrates & energetics; enzyme; diving; fructose diphosphatase in kidney & liver), 1980a (Carbohydrate & energetics; diving; enzyme; thermoregulation; molecular adaptations to diving habitat; liver & kidney cortex fructose-1,6-bisphosphatase; molecular mechanisms of temperature regulation), 1980b (Diving; carbohydrate & energetics; thermoregulation; molecular adaptation to diving; role of glycerol; lactate from glycogen; glycerol from triglycerides); Behrisch & Percy 1974 (Enzyme; carbohydrate & energetics; thermoregulation; temperature & regulation of enzyme activity; homeothermic & heterothermic tissues; regulatory properties of 6-phosphogluconate dehydrogenase from adipose); Bergman et al. 1981 (Toxic compounds; endocrinology; PCB in Baltic); Bigg 1969 (Special topic; British Columbia), 1972 (Reproduction; control of annual reproduction in female), 1981 (Nutrition; care; reproduction; diving; thermoregulation; reproduction; molting; handbook); Bigg & Fisher 1974 (Reproduction; reproductive cycle of females; Vancouver I.); Blix et al. 1970 (Carbohydrate & energetics; enzyme; diving; lactate dehydrogenase in diving); Blix & Steen 1979 (Thermoregulation; newborns; review); Bonner 1972a (Special topic; European waters); Bonner & Fogden 1971 (Haematology; blood typing; electrophoresis); Bonnot 1932 (Food; food habits; Phoca richardii); Bossanyi 1947 (Care; keeping of a baby); Boulva 1973 (Special topic; E. Canada); Boulva & McLaren 1979 (Milk & lactation; molting; reproduction; biology; birth size & date; lactation period; mating, molting & maturity; ovulation & implantation); Bowes & Jonkel 1975 (Toxic compounds; PCB: food chains in Arctic & subarctic); Bradley & Bing 1942 (Diving; mineral; renal function during asphyxial eschemia & pyrogenic hyperemia); Bradley et al. 1950 (Mineral; water; water & electrolyte excretion), 1954 (Mineral; endocrinology; water; renal excretion of Na, K & water; effect of apnea, Na, K & water loading; pitressin & mercurial diuresis); Bradshaw et al. 1969a (Myoglobin; characterization of tryptic peptides of myoglobin), 1969b (Myoglobin; isolation & characterization of tryptic peptides of myoglobin); Bradshaw & Gurd 1969 (Myoglobin; amino acid sequence); Brockerhoff 1966 (Lipid; fatty acid distribution in depot fats); Brockerhoff & Hoyle 1963 (Lipid; structure of depot fats; triglycerides); Brockerhoff et al. 1966a (Lipid; positional distribution of fatty acids in depot triglycerides), 1968 (Lipid; position distribution of fatty acids in depot triglycerides); Brocklesby 1941 (Lipid; product; chemistry & technology of oil); Brown & Mate 1983 (Food; special topic; abundance movements & feeding habits; Netarts Bay & Tillamook Bay, Oregon; eat fish; radio tagging; fecal analysis); Bullier 1935 (Mineral; nutrition; NaCl poisoning in captive); Cansdale 1970 (Care; hand-rearing at Skegness Natureland); Caines 1978 (Toxic compounds; heavy-metal residues; Farne I.); Cargill et al. 1979 (Care; haematology; blood plasma constituents change with age & sex); Castellini 1979 (Diving; enzyme; enzymatic profile); Castellini et al. 1981 (Carbohydrate & energetics; enzyme; glycolytic enzyme activities; lactate dehydrogenase & pyruvate kinase); Cheng & Parks 1972 (Enzyme; nucleic acid; nucleoside diphosphokinase isozymes in tissues); Davis 1980 (Carbohydrate & energetics; diving; lactate & glucose metabolism during resting & diving); Davis & Kooyman 1979 (Diving; carbohydrates & energetics; energetics & intermediary metabolism); Depocas et al. 1969 (Water; sea-water drinking; water balance), 1971 (Water; sea-water drinking & water flux in starved & fed); Drescher 1976 (Toxic compounds; organochlorines & heavy metals; German North Sea), 1978 (Molting; skin lesions; North Sea); Drescher et al. 1977 (Toxic compounds; Zn, Cu, Hg, Cd, Pb, lindane & dieldrin in blubber, kidney, liver & brain; levels change with age; German North Sea); Duinker et al. 1979 (Toxic compounds; Cu, Pb, Zn, Cd, PCB, DDT & metabolites in brain, liver, spleen & heart; Dutch Wadden Sea); Dunbar 1949 (Food; Arctic & subarctic); Elsner et al. 1977 (Special topic; carotid body chemoreceptor reflexes & other interactions); Everitt et al. 1981 (Food; prey items in Puget Sound, Washington); Fairley 1972 (Bibliography; Ireland); Feltz & Fay 1966 (Thermoregulation; thermal requirements in vitro of epidermal cells); Fetcher 1939 (Water; nutrition; water balance); Finch 1965 (Reproduction; research prospects into mother-infant relationship in captivity); Finer 1954 (Anaesthesia); Finley 1976 (Food; special topic; status studies in central District of Franklin, N.W.T.); Fisher et al. 1975 (Carbohydrate & energetics; thermoregulation; temperature effects on oxygen consumption rates in tissues); Fisher 1952 (Food; status; Skeena River, B.C.), 1954 (Reproduction; delayed implantation); Freeman & Horne 1972 (Toxic compounds; Hg; Canada); Galster & Burns 1972 (Toxic compounds; accumulation of pesticides; Alaska); Garibaldi et al. 1979 (Special topic; beachings); Garner et al. 1973 (Myoglobin); Gaskin et al. 1973 (Toxic compounds; milk & lactation; Hg, DDT & PCB in depot fats of lactating females; Bay of Fundy to Gulf of Maine), 1974 (Toxic compounds; Hg, PCB & dieldrin in muscle, kidney, liver & blubber, St. Lucia, Lesser Antilles); Geraci 1974 (Vitamin; nutrition; thiamine deficiency; high blood cell transketolase), 1978a (Nutrition; care; dietary disorders); Geraci & St. Aubin 1979a (Special topic; stress & disease in marine environment strandings); Gilman 1979 (Myoglobin; haematology; ethyl iso-

cyanide bound to myoglobin & hemoglobins); Gol'tsev 1971 (Food; feeding); Goodman et al. 1975 (Haematology; taxonomy & evolution; Darwinian evolution in the geneaology of hemoglobins); Graybill & Hodder 1981 (Food; haulout & diet in Coos County, Oregon); Griner 1971 (Haematology; special topic; malignant leukemic lymphoma); Gurd et al. 1980 (Myoglobins; electrostatic stabilization in myoglobins); Halasz et al. 1974 (Mineral; special topic; renal recovery from ischemia); Hance et al. 1982 (Endocrinology; diving; plasma catecholamines changes & enforced diving); Hapner et al. 1968 (Myoglobins; comparison of hemoglobins of whales & pinnipeds); Harmes et al. 1977/1978 (Toxic compounds; Cu, Zn, Cd, Pb, Hg, PCB & DDT in muscle, blubber, brain & liver); Harrison 1964 (Reproduction; delayed implantation); Harrison et al. 1962 (Nutrition; endocrinology; growth & structure of thyroid gland); Hart & Irving 1959 (Thermoregulation; carbohydrate & energetics; energetics in air & water; seasonal changes); Hartzell et al. 1968a (Myoglobin; reactivity to Cu & H ions), 1968b (Myoglobin; hemic disassociation & their alkylated derivatives); Helminen et al. 1968b (Toxic compounds; Hg in Finnish freshwater seals; P.v. saimensis), 1973 (Marine mammals; PCB in Finnish environment); Heppleston & French 1973a (Toxic compounds; Hg & other metals; U.K.); Heu 1977 (Taxonomy & evolution; reproduction; nutrition); Hiatt & Bradley 1971 (Mineral; control of glomerular function); Hiatt & Hiatt 1942 (Mineral; nutrition; effect of food on glomerular filtration rate & renal blood flow); Hilditch & Pathak 1949 (Lipid; component fatty acids in liver & blubber; glycerides & phospholipids); Hochachka 1973 (Carbohydrate & energetics; diving; multiple end-products of anaerobiosis); Hochachka et al. 1975 (Carbohydrate & energetics; diving; multiple end-products of anaerobiosis; carbohydrates to pyruvate & lactate; amino acids to succinate); Holden 1971a (Toxic compounds; organochlorine residues; North Sea), 1972 (Toxic compounds; monitoring organochlorine residues), 1975 (Toxic compounds; accumulation of oceanic contaminants; DDT, dieldrin, PCB & Hg in blubber & other tissues), 1978a (Toxic compounds; pollutants); Holden & Marsden 1967 (Toxic compounds; DDT & dieldrin in liver, brain & blubber); Holmquist et al. 1976 (Haematology; evaluation of globin family of genes; maximum parsimony genetic distances from w-hemoglobins & myoglobin phylogenies); Hong et al. 1982a (Mineral; anoxia & low pH on organic ion transport & electrolyte distribution in kidney slices), 1981 (Mineral; nitrogen & low pH on organic ion transport & electrolyte distribution in kidney slices); Irving et al. 1935a (Water; water balance), 1935e (Carbohydrate & energetics; diving; respiratory mechanism & adjustment to diving); Irving & Hart 1957 (Carbohydrate & energetics; thermoregulation; metabolism & insulation in cold water); Jangaard et al. 1963a (Lipid; component fatty acids of blubber fat, P.v. concolor); Jarrell 1981 (Diving; enzyme; carbohydrate & energetics; aerobic-anaerobic theory of LDH isozyme function); Jensen & Jansson 1976a (Toxic compounds; anthropogenic substances from Baltic; methyl sulfone metabolites of PCB's & DDE); Jones 1981 (Food; food habits; N. California); Kendrew et al. 1954 (Taxonomy & evolution; myoglobin; spp. specificity of myoglobin); Kendrew 1963 (Myoglobin; myoglobin & structure of proteins); Kenyon 1965 (Food; Anchitka I., Alaska); Kerem et al. 1971 (Carbohydrate & energetics; diving; anaerobic metabolism in brain during late stages of a maximum dive); Kerem & Elsner 1973 (Diving; cerebral tolerance to asphyxial hypoxia); Kerkhoff & de Boer 1982 (Toxic compounds; residues of chlorinated hydrocarbons; chlordane compounds; Netherlands); Kerkoff et al. 1981 (Toxic compounds; heptachlor epoxide); Koeman et al. 1973a (Toxic compounds; correlation between Hg & Se in tissues); Koeman & van Genderen 1966 (Toxic compounds; residues of chlorinated hydrocarbons; Netherlands); Kooyman et al. 1972 (Diving; blood nitrogen tension; simulated deep dives); Kooyman & Sinnett 1982 (Diving; pulmonary shunts during simulated dives to depth); Koschier et al. 1978 (Mineral; organic ion transport by renal cortical slices); Kosygin & Gol'tsev 1971 (Food; special topic; data on morphology & ecology in Tatar Str.); Kraft 1962 (Haematology; blood analysis); Krogh 1965 (Mineral; osmotic regulation); Krogh & Iversen 1968a (Thermoregulation; comparative studies of temperature gradients in limbs & blubber), 1968b (Carbohydrate & energetics; thermoregulation; metabolism); Lavigne & Ronald 1975 (Vitamin; visual pigments); Lenfant & Johansen 1968 (Haematology; morphological & chemical properties of blood); Lincoln et al. 1973 (Haematology; taxonomy & evolution; hemoglobin electrophoresis); Litchfield 1968 (Lipid; predicting positional distribution of 22:6w3 & 20:5w3 in triglycerides); Lowrance et al. 1956 (Mineral; anoxic anoxia & apnea on renal function); Lowry et al. 1977 (Food; special topic; trophic relationships among ice-inhabiting phocids; Beaufort Sea); Lyall-Watson 1962 (Care; milk & lactation; nutrition; animal milk analysis; hand-rearing techniques); Mansfield 1967 (Food; Arctic & E. Canada); Marks 1970 (Myoglobin), 1971 (Myoglobin); Matsuura & Whittow 1973 (Carbohydrate & energetics; thermoregulation; oxygen uptake during exposure to heat); McDermid & Bonner 1975 (Carbohydrate & energetics; enzyme; haematology; protein; nucleic acid; red cell & serum protein systems; electrophoresis of enzymes & hemoglobin; peptidase C; phosphoglucomutase; nucleoside phosphorylase; adenylate kinase; hemopexin system); McLaren 1966 (Taxonomy & evolution; taxonomy of N.W. Pacific & evolution of other hair seals); McTaggart 1972 (Reproduction; gross embryological development & fetal growth); Medway & Geraci 1978 (Haematology; pathology); Miller & Irving 1975 (Thermoregulation; carbohydrates & energetics; metabolism & temperature regulation); Miller et al. 1972 (Carbohydrate & energetics; thermoregulation; newborn & developing; metabolism & temperature regulation), 1976 (Thermoregulation; carbohydrate & energetics; oxygen uptake & temperature regulation in water); Minato 1949 (Lipid; vitamin; constituents of body oil; iodine No., saponification No., unsaponifiable matter & vitamin A); Montagna & Harrison 1957 (Enzyme; special topic; specialization of skin; sebaceous gland alkaline phosphatase, esterase & succinate dehydrogen-

ase); Murdaugh et al. 1961a (Mineral; volume receptors & post-prandial diuresis), 1967 (Haematology; mineral; cation transport of erythrocytes), 1961b (Diving; mineral; cessation of renal function during diving of trained); Naito & Nishiwaki 1975 (Food; special topic; ecology & morphology; Okhotsk Sea & N.W. Hokkaido); Nelson 1971 (Lipid; haematology; lipid; composition of blood; red blood cell & serum phospholipids (PC, PS, SPH) & glucosphingolipids); Newby 1978 (Special topic); Nigen 1972 (Myoglobin; myoglobin study by chemical modification & 13C-NMR); Nigen & Gurd 1973 (Myoglobin); Nigen et al. 1972a (Myoglobin), 1973 (Myoglobin), 1972b (Myoglobin), 1959 (Myoglobin); Northrup 1981 (Toxic compounds; P.v. richardsi; detoxification of methylmercury); Olsson 1978 (Toxic compounds; PCB in the Baltic); Osipova 1976 (Endocrinology; age-related histological changes in ovaries; corticosteroids; 17-ketosteroids); Page et al. 1954 (Mineral; effect of variation in filtration rates in urinary concentrating mechanism; pitressin); Patterson 1972 (Thermoregulation; with reference to insulative quality of dry pelage, P.v. richardi); Patton & Saruba 1979 (Special topic; strandings in Los Angeles & Orange counties); Pauly & Wolfe 1957 (Taxonomy & evolution; haematology serological relationships of order Carnivora); Pearce et al. 1973 (Toxic compounds; toxic chemicals; Gulf of St. Lawrence); Picken 1975 (Special topic; care; Phoca v. vitulina; rearing & some experiments), 1978 (Care; growth & behaviour of hand-reared seal; P.v. vitulina); Pitcher 1977 (Food; reproduction), 1980a (Food; P.v. richardsi; Gulf of Alaska), 1980b (Food; stomach contents & feces indicator of food eaten; Gulf of Alaska); Pitcher & Calkins 1975 (Toxic compounds; distribution in relation to petrochemical development; Prince William Sound & Gulf of Alaska); Power & Gregoire 1978 (Food; freshwater seals eat fish; Lower Seal Lake, Quebec); Puppione 1969 (Haematology; lipid; protein; physical & chemical characterization of serum lipoproteins), 1978 (Haematology; lipid; protein; serum lipoprotein during alimentary lipemia; LDL, VLDL, HDL & chylomicron electrophoresis); Puppione & Coggiola 1966 (Haematology; lipid; protein; serum lipoprotein distribution); Puppione & Nichols 1970 (Haematology; lipid; protein; characterization of chemical & physical properties of serum lipoproteins); Raeside & Ronald 1981 (Endocrinology; reproduction; plasma concentrations of estrone, progesterone & adrenocorticoids during late pregnancy & maturation); Reichenow 1839 (Bibliography; captivity); Reineck 1962 (Care; rearing abandoned sucklings); Reijnders 1976 (Special topic; population, size & composition; Dutch Wadden Sea), 1979 (Toxic compounds; organochlorine & heavy metal residues; Schleswig Holstein, Denmark & the Netherlands), 1980 (Toxic compounds; PCB, o,p'-DDT, DDT, DDE, p,p'-DDE, dieldrin, aldrin, endrin, endosulfan, heptachlor epoxide, pentachlorobenzene, Hg, CH_3Hg & Se), 1982a (Toxic compounds; population dynamics, residue levels; Wadden Sea); Reijnders & Wolff 1981 (Special topic; life history; population dynamics & disease); Renouf et al. 1983 (Special topic; mother-pup relationships); Riviere 1978 (Molting; care; possible significance to exotic animal medicine); Roberts et al. 1976 (Toxic compounds; Cd, Pb & Hg in the liver); Robin et al. 1971 (Carbohydrate & energetics; haematology; mineral; cation transport in high Na & low K erythrocytes), 1980 (Carbohydrate & energetics; diving; depressed energy & O_2 requirements), 1981 (Carbohydrate & energetics; diving; glucoregulation & simulated diving; plasma glucose, glucagon & insulin), 1965 (Carbohydrate & energetics; diving; energy exchange during diving), 1970 (Haematology; diving; biochemical adaptations subserving prolonged diving), 1968 (Carbohydrate & energetics; haematology; energy metabolism in the erythrocytes); Rodahl & Davis 1949 (Vitamin; liver vitamin A content); Romero-Herrera et al. 1973 (Taxonomy & evolution; myoglobin; molecular evolution of myoglobin; fossil record; phylogenetic synthesis); Rothgeb & Gurd 1978 (Haematology; endocrinology; steroids in the plasma); Rumen 1959 (Taxonomy & evolution; myoglobin; isolation of 5 myoglobins), 1960 (Myoglobin; amino acid composition of myoglobin 1); Rumen & Apella 1966 (Myoglobin; molecular association behavior of apomyoglobins); Saito & Yokoyama 1954 (Endocrinology; insulin extraction from Langerhans' islets); Sarich 1972 (Haematology; nonidentity of several carnivore hemoglobins); Scheffer & Slipp 1944 (Special topic; Washington); Schmidt-Nielsen et al. 1959 (Diving; protein; urea excretion & diving); Scholander 1964 (Diving; handbook of physiology); Scholander et al. 1950 (Thermoregulation; adaptation to cold in Arctic mammals in relation to body temperature, insulation & basal metabolic rate), 1942b (Diving; thermoregulation; temperature & metabolism during diving); Scouloudi 1960 (Myoglobin; structure), 1969 (Myoglobin), 1978 (Myoglobin; metmyoglobin molecules); Scouloudi & Baker (Haematology; myoglobin; x-ray crystallographic studies of myoglobin molecule at 2.5 angstroms resolution); Scouloudi & Prothero 1965 (Myoglobin); Sergeant & Armstrong 1973 (Toxic compounds; Hg; E. Canada); Shapiro et al. 1972 (Endocrinology; diving; diving on peripheral venous renin); Shaughnessy 1968 (Taxonomy & evolution; population studies; identification of populations), 1971 (Taxonomy & evolution; biochemical comparison of pagophilic & pagophobic; P.v. largha & P.v. richardi), 1975a (Taxonomy & evolution; biochemical identifications), 1975b (Haematology; taxonomy & evolution; biochemical comparison of P.v. richardi & P.v. largha; electrophoresis of albumin, hemoglobin, lactate dehydragenase & heme-binding proteins); Shaughnessy & Fay 1977 (Taxonomy & evolution; nomenclature; review); Shaw 1971b (Toxic compounds; DDT, DDD & DDE in fats); Shire et al. 1975 (Myoglobin; electrostatic effects in myoglobin application of Tanford-Kirkwood theory to myoglobins); Simon et al. 1974 (Diving; carbohydrate & energetics; biochemical basis for differences in diving times); Sinnett et al. 1981 (Anaesthesia; thermoregulation; cardiovascular depression & thermoregulatory disruption by pentothal/halothane anaesthesia); Skinder 1979 (Nutrition; captivity); Slijper 1958 (Special topic; organ weights & symmetry problems); Smith

1936 (Mineral; composition of urine); Sobolevski 1982 (Special topic; Phoca v. insularis; distribution, numbers & ecological features); Sokolov 1966 (Haematology; ecolo-functional & age peculiarities of red blood), 1967 (Haematology; blood properties; N. Pacific); Somero & Johansen 1970 (Enzyme; thermoregulation; temperature effects on enzymes from homeothermic & heterothermic tissues); Sordal et al. 1983 (Diving; enzyme; carbohydrate & energetics; comparative functional properties of mitochondria; cytochrome oxidase); Spalding 1964 (Food; comparative feeding habits, British Columbia); St. Aubin & Geraci 1980 (Vitamin; vitamin C levels in adrenals, epidermis, muscle & blubber); Stroud 1975 (Special topic; nephrolithiasis in an adult); Stroud & Roffe 1979 (Special topic; causes of death when stranded, Oregon); Stroud & Stevens 1980 (Special topic; lymphosarcoma); Suderman et al. 1980 (Haematology; heterogeneity & partial sequences of hemoglobins); Svizhenko 1983 (Biological sonar; analysis of spectral characteristics of sound signals); Tarasoff & Toews 1972 (Mineral; osmotic & ionic regulatory capacity of kidney); Ten Noever de Brauw et al. 1973 (Toxic compounds; Mirex); Tetaert et al. 1974 (Myoglobin; primary sequence of myoglobins); Theil & Theil 1971 (Myoglobin; haematology; hemoglobin), 1972 (Haematology; myoglobin; molecular characteristics of hemoglobin & myoglobin); Tomilin 1977 (Thermoregulation; peri-, semi-, & aquatic mammals); Tsunoo et al. 1967 (Protein; histidine compounds in the musculature & brain); Van Der Zande & De Ruiter 1983 (Toxic compounds; lipid; quantitation of PCB by microwave plasma detection & analysis in PCB in blubber lipid); Ver Ploeg et al. 1971 (Myoglobin; mechanism & catalysis for addition of cyanide to myoglobins); Versaggi 1975 (Haematology; mineral; intraosseous architecture; relation to acid-base homeostasis); Vigna et al. 1974 (Myoglobin; complete covalent structure of polypeptide chain); Wagemann & Muir 1984 (Toxic compounds; heavy metals & organochlorine concentrations); Wasserman & McKenzie 1956 (Diving; special topic; haematology; plasma volume, cardiac output & correlation time studies); Webster et al. 1981 (Special topic; influenza virus); West et al. 1979a (Lipid; fatty acid composition of blubber; Bering Sea; P.v. largha); White et al. 1971 (Water; freshwater ingestion & water flux in captive); Wilke 1957 (Food; Amchitka I.); Wilke & Kenyon 1952 (Food; note on food); Woodhouse et al. 1979 (Special topic; strandings; Santa Barbara channel); Yayanos 1968 (Haematology; temperature dependence of viscosity of heparinized blood); Zoological Society of London 1978 (Care; reproduction; captivity).

Phoca spp.

Doutt 1942 (Bibliography; review of genus); Olsson 1980 (Toxic compounds; taxonomy & evolution; content of C-14; northern Europe).

Pusa caspica (Gmelin, 1788) (Caspian seal)

Andreev 1978 (Special topic; structural & functional properties of the eye); Chapskii 1965a (Reproduction; nutrition; growth & onset of sexual maturity in females); Chuznakina & Gudkov 1978 (Care; nutrition; feeding in captivity); Frost & Lowry 1981a (Reproduction; taxonomy & evolution; nutrition; handbook); Galantsev et al. 1983 (Special topic; ecological physiological peculiarities of heart activity); Heu 1977 (Nutrition; taxonomy & evolution; reproduction); Johansen 1934 (Nutrition); Korzhuev & Glazova 1967b (Haematology; myoglobin; concentration of muscle hemoglobin), 1967c (Myoglobin; concentration of heart & muscle hemoglobin); Magomaev 1966a (Lipid; characteristics of fat composition), 1966b (Lipid; biological factors on fat composition), 1970 (Lipid; temperature difference on density of oil); Magomaev & Olenchenko 1969 (Protein; amino acid composition of meat & internal organs), 1971 (Haematology; mineral; level of macro- and microelements in meat, viscera & blood; 17 elements); Magomaev & Omarov 1975 (Lipid; fat content & fatty acid composition subcutaneous fat, muscle tissue & liver); Mikeladze 1971 (Care; Batumia aquarium); Mukhametov et al. 1982 (Special topic; electroencephalographic investigation of sleep); Olenchenko 1972a (Mineral; nutrition; water; growth dynamics of water volume & mineral content of tissues & organs), 1972b (Nutrition; protein; character of change in volume of albumin & irreplaceable amino acids in process of growth in development); Olenchenko & Magomaev 1974 (Product; feed meal from carcasses); Olsson 1978 (Toxic compounds; reproduction; PCB in the Baltic); Osipov 1931 (Lipid; product; industrial fat; physicochemical constants).

Pusa hispida (Schreber, 1775) (ringed seal)

Addison 1973 (Toxic compounds; DDT, PCB & dieldrin in blubber; Canadian Arctic); Addison & Smith 1974 (Toxic compounds; PCB & DDT level in blubber; change with age & sex); Anbinder 1975a (Taxonomy & evolution; karotypes); Andreev 1978 (Special topic; structural & functional properties of the eye); Arvy 1973 (Endocrinology; adrenal glands; biochemistry); Austin 1976 (Haematology; enzyme; tissue distribution & plasma levels of 4 clinical enzymes); Austin & Geraci 1981 (Care; haematology; enzyme; plasma & tissue activities enzymes; creatine kinase, aldolase, γ-glutamyl transferase & leucine aminopeptidase; clinical applications); Bagge 1975 (Toxic compounds; pesticides residues; Baltic); Beck & Smith 1976 (Special topic; seal finger; unsolved medical problem); Belopolskii 1935 (Lipid; oil); Best 1976 (Nutrition; carbohydrates & energetics); Blix & Steen 1979 (Thermoregulation; newborns; review); Blood 1977 (Toxic compounds; oil spills; Beaufort Sea); Borisov 1969b (Taxonomy & evolution; haematology; protein; antigenic properties of serum proteins); Bowes & Jonkel 1975 (Toxic compounds; PCB; food chain in Arctic & subarctic); Bowes & Lewis 1974 (Toxic compounds; PCB, DDT & DDE in liver fat; extraction of pesticides); Brestkin et al. 1971 (Enzyme; brain cholinesterase; P.h. lagodensis); Clausen 1975 (Toxic compounds; PCB content in Arctic ecosystems); Clausen et al. 1974 (Toxic compounds; lindane; heptachlor, heptachlor epoxide, aldrin, PCB & DDE in adi-

pose); Dobrowski 1978 (Toxic compounds; DDT in organs & tissues); Dunbar 1941 (Food; Canadian E. Arctic), 1949 (Food; Arctic & subarctic); Eaton et al. 1980 (Toxic compounds; Hg in liver; toxicity to cats); Engelhardt 1982 (Endocrinology; toxic compounds; metabolism of naphthalene-C-14 to water-soluble compounds occurring in urine & plasma; cortisol in plasma; hydrocarbon hydroxylase in liver & kidney), 1978 (Toxic compounds; absorption & clearing of petroleum hydrocarbons (benzene-H-3; naphthalene-C-14) in blood, kidney, liver & urine); Engelhardt et al. 1977 (Toxic compounds; uptake & clearance of petroleum hydrocarbons; Norman Wells crude oil; components in tissues; blood plasma, bile & urine); Fairley 1972 (Bibliography; Ireland); Fetcher 1939 (Nutrition; water; water balance); Fedoseev 1963 (Reproduction; maturation & rates of reproduction; Okhotsk Sea), 1964 (Reproduction; embryonic & post-embryonic growth; sexual maturation; Okhotsk Sea), 1965 (Food; feeding habits; Okhotsk Sea); Ferren & Elsner 1979 (Diving; physiology; adaptations & implications); Finley 1978 (Food; special topic; behavior & densities during haul out in the high Arctic, June 1977), 1979 (Special topic; haul out behavior & densities; Barrow Str. area, N.W.T.); Finley et al. 1983 (Special topic; reproduction; distinctive large breeding population inhabiting Baffin Bay); Fisher et al. 1975 (Carbohydrate & energetics; thermoregulation; temperature effects on oxygen consumption rates in tissues); Freeman & Horne 1972 (Toxic compounds; Hg; Canada); Frost et al. 1979 (Toxic compounds; nutrition; feeding patterns, trophic relationship & possible effect of offshore petrochemical development); Frost & Lowry 1981 (Food; feeding & trophic relationships), 1981a (Reproduction; taxonomy & evolution; nutrition); Galster & Burns 1972 (Toxic compounds; accumulations of pesticides; Alaska); Garibaldi et al. 1979 (Special topic; beachings); Gavrilenko 1952 (Vitamin; vitamin A content in liver); Geraci 1976 (Toxic compounds; direct & indirect effects of oil; Beaufort Sea), 1981a (Nutrition; care; dietary disorders in captivity); Geraci & Smith 1975 (Haematology; special topic; functional haematology; use vertebral extradural vein for blood sampling; Canadian Arctic), 1977a (Toxic compounds; behaviour & pathophysiology of exposure to crude oil), 1976 (Toxic compounds; direct & indirect effects of oil; Beaufort Sea), 1977 (Toxic compounds; oil fouling); Geraci et al. 1979 (Carbohydrate & energetics; enzyme; lipid; mineral; protein; age, condition, sampling time & method on plasma chemical constituents in free ranging animals; Herschel I., Yukon; Ca, K, PO_4, Na, Cl, cholesterol, uric acid, triglycerides, glucose, bilirubin, BUN, alkaline phosphatase & aspartate aminotransferase); Guderley & Bouchard 1982 (Enzyme; taxonomy & evolution; carbohydrate & energetics; electrophoresis of isozymes of pyruvate kinase in muscle & heart); Hall 1977 (Special topic; nutrition; nonlethal lavage device for sampling stomach contents); Harms et al. 1977/1978 (Toxic compounds; Cu, Zn, Cd, Pb, Hg, PCB & DDT in muscle, liver, blubber & brain); Helle et al. 1976a (Toxic compounds; PCB & DDT levels in pregnant & nonpregnant & effect on reproduction; Bothnian Bay), 1976b (Toxic compounds; DDT & PCB in pregnant & nonpregnant; occlusion of the uterine horn), 1976c (Toxic compounds; endocrinology; environmental poisons; Baltic Sea), 1983 (Toxic compounds; levels of DDT, PCB, chlordane & chlorophenol in liver fat of inland population in E. Finland); Helminen et al. 1968a (Toxic compounds; Hg content; freshwater seals, Lake Saimoa); Heu 1977 (Reproduction; nutrition); Holden 1971a (Toxic compounds; organochlorine residues; North Sea), 1972 (Toxic compounds; monitoring organochlorine contamination), 1978 (Toxic compounds; pollutants); Hong et al. 1982b (Mineral; renal functions); Igarashi & Kakubata 1952 (Lipid; bile salts; ω-phocaecholic acid); Jensen & Jansson 1976a (Toxic compounds; anthropogenic substances from Baltic Sea; methyl sulfone metabolites of PCB's & DDE); Johansen et al. 1980 (Toxic compounds & organochlorines in Greenland); Kari & Kauranen 1978 (Toxic compounds; Hg & Se; Finland); Kizevetter 1950 (Proximate composition; product; technical & chemical characteristics); Kostareva et al. 1970 (Toxic compounds; Sr-90, Sr & Ca; P.v. largha); Kumlien 1879 (Food; special topic; Howgate Polar Expedition, 1877-78 in Arctic); Lewis & Lentfer 1967 (Vitamin; vitamin A content in liver); Lowry et al. 1977 (Food; special topic; trophic relationships among ice-inhabiting phocids; Beaufort Sea), 1978 (Food; special topic; Point Barrow, Alaska), 1980b (Food; variability in diet; Alaska; eat saffron cod); Malins 1977 (Toxic compounds; oil fouling; Arctic & subarctic); McLaren 1955a (Food; feeding), 1955b (Reproduction), 1955c (Special topic; ageing), 1958a (Food; special topic; biology; Canadian E. Arctic); Medway & Geraci 1978 (Haematology; pathology); Messelt & Blix 1973 (Carbohydrate & energetics; enzyme; amylase; salivary gland); Moller et al. 1966 (Haematology; taxonomy & evolution; blood analysis on populations); Müller-Wille 1974 (Toxic compounds; special topic; oil pollution; legislation; Repulse Bay, Naujaa, N.W.T.); Naevdal 1966 (Haematology; protein; taxonomy & evolution; hemoglobin & serum protein electrophoresis); Olsson 1978 (Toxic compounds; reproduction; PCB in Baltic), 1980 (Taxonomy & evolution; content of C-14; N. Europe); Oritsland & Smith 1975 (Thermoregulation; molting; heat budget & insulation), 1976 (Toxic compounds; carbohydrate & energetics; effect of crude oil on fur; energy balances); Parchevskii et al. 1973 (Toxic compounds; Sr-90 content in bone & muscle; Okhotsk & Bering seas); Parsons 1977 (Special topic; metabolic studies); Percy 1977 (Toxic compounds; nutrition; effects of oil); Pikharev 1946 (Food); Pimlott 1974 (Toxic compounds; oil & gas in Arctic waters); Rezvov 1977 (Food); Shustov 1970 (Food; special topic; daily dynamic in seal rookeries in Sea of Okhotsk); Simonsen et al. 1982a (Enzyme; taxonomy & evolution; polymorphic enzymes in liver & muscle; electrophoretic variations); Smith 1973a (Food; special topic; population dynamics; Canadian E. Arctic), 1973b (Food; special topic; management research), 1975 (Special topic; James Bay & Hudson Bay, population estimates & catch statis-

tics), 1975a (Special topic; parameters & dynamics in Canadian E. Arctic), 1976 (Special topic; predation by Arctic fox), 1977 (Food; eat wolffish; Amundsen Gulf sea area), 1978 (Special topic, variation in density Amundsen Gulf), 1980 (Special topic; eaten by polar bear); Smith & Armstrong 1975 (Toxic compounds, Hg; Inuit food at Holman, N.W.T.), 1978 (Toxic compounds; Hg & Se & CH_3Hg in tissues, liver; change with age); Smith & Hammill 1980 (Special topic; breeding habitat; Baffin I., Canada), 1981 (Special topic; ecology in fast ice breeding habitat); Smith & Stirling 1975 (Special topic; breeding habitat; birth lair & associated structure); Smith et al. 1973 (Special topic; care; capture, handling & branding); Sokolov 1966 (Haematology; ecolo-functional & age pecularities of red blood cells), 1967 (Haematology; blood properties; N. Pacific); Sokolova & Parchevskii 1968 (Toxic compounds; radioactivity), 1972 (Toxic compounds, Pb-210; Okhotsk & Bering seas); Sokolova et al. 1971 (Toxic compounds; Sr-90 method of determination; P.h. ochotensis); St. Aubin & Geraci 1977 (Enzyme; protein; tissue distribution & plasma levels of liver enzymes; alanine aminotransferase, aspartate aminotransferase, ornithine carbamyltransferase & sorbitol dehydrogenase; species & tissues differences in activity); St. Aubin et al. 1978 (Haematology; blood volume determination); Stirling 1973 (Special topic; biological sonar; vocalization), 1977 (Special topic; adaptation to exploit polar fast-ice habitat in presence or absence of land predators); Suderman et al. 1978 (Haematology; heterogeneity & partial sequences of hemoglobins); Tillander et al. 1970 (Toxic compounds; excretion rate of CH_3Hg), 1970a (Toxic compounds; excretion rate of CH_3Hg); Usher & Church 1969a (Special topic; relationship of weight, length & girth; Canadian Arctic), 1969b (Special topic; field table for calculation of weight from girth & length); Vilyams & Makhrov 1935 (Lipid; chemical properties of oil); Wagemann & Muir 1984 (Toxic compounds; heavy metals & organochlorine concentrations); West et al. 1979a (Lipid; fatty acid composition of blubber; Bering Sea); Wilber & Musacchia 1950 (Lipid; comparative study of lipids).

Pusa sibirica (Gmelin, 1788) (Baikal seal)

Anbinder 1975a (Taxonomy & evolution; karotypes); Andreev 1978 (Special topic; structural & functional properties of the eye); Heu 1977 (Nutrition; reproduction; taxonomy & evolution); Hong et al. 1982b (Mineral; renal function); Kamenetskii 1929 (Special topic; lipid; blubber); Neshumova et al. 1983 (Myoglobin; diving; distribution in muscle blood supply O_2); Pastukhov 1969 (Food; nutrition; research on nutrition), 1971 (Food; feeding under experimental conditions); Pastukhov et al. 1969 (Food; special topic; age & weight characteristics of the sculpin forming the food); Ronald & Kay 1982 (Haematology; proximate composition; haematology & plasma chemistry of captives); Suderman et al. 1978 (Haematology; heterogeneity & partial sequences of hemoglobins).

MUSTELIDAE

Enhydra lutris (sea otter)

Baker et al. 1981 (Toxic compounds; Lutra lutra; mortality & marine oil pollution); Breen et al. 1982 (Food; changes in subtidal community structure associated with British Columbia transplants); Calkins 1978 (Food; eat clam, crab, sea stars, fish & sea urchins; Montagne Str., Prince William Sound, Alaska); Castellini et al. 1981 (Carbohydrate & energetics; enzyme; glycolytic enzyme activities in tissues); Costa 1978 (Mineral; water; carbohydrate & energetics; ecological energetics; water & electrolyte balance), 1982 (Carbohydrate & energetics; mineral; protein; water; energy; nitrogen electrolyte flux & sea water drinking); Costa & Kooyman 1982 (Carbohydrate & energetics; thermoregulation; oxygen consumption; oiling & washing of fur); Duggins 1980 (Food; eat urchins; kelp beds); Engelhardt 1983 (Toxic compounds; thermoregulation; bibliography; review; oil spill on thermoregulation, neurotoxicity, dermal toxicity & hemotoxicity); Erlinge & Jensen 1975 (Food; Denmark); Estes 1977 (Food; population estimates & feeding behaviors); Estes et al. 1982 (Food; activity & prey selection), 1978 (Food; predation on sea urchins, W. Aleutian I., Alaska); Fausett 1976 (Nutrition; assimilation efficiency of captive); Gelentyuk et al. 1972 (Haematology; some properties of blood); Iversen & Krog 1973 (Thermoregulation; heat production & body surface area); Jameson 1975 (Special topic; observation of captive); Jenness et al. 1981 (Milk & lactation; composition of milk); Kenyon 1969 (Special topic; Pacific Ocean); Kooyman et al. 1977 (Thermoregulation; thermal conductance of immersed pelts before & after oiling with Prudhoe Bay crude); Lenfant et al. 1970a (Carbohydrate & energetics; gas storage & O_2 capacity); Loughlin 1977 (Special topic; activity patterns & grooming behavior; California), 1979 (Special topic; 24-hour feeding activity using radiotelemetric determination); McCleneghan & Ames 1976 (Food; eat octopus & abalone; unique method of prey capture); Miller 1974 (Taxonomy & evolution; review of taxonomic status; life history & some ecological interaction); Moors 1980 (Food; reproduction; roles of food habits & breeding systems); Morris et al. 1981 (Food; transplants to British Columbia); Morrison et al. 1974 (Thermoregulation; metabolism & thermoregulation); Ostfeld 1982 (Food; foraging strategies; eat crustaceans & molluscs); Palmisano & Estes 1977 (Special topic; habitat; California); Pearse 1975 (Special topic; habitat; California); Ponganis & Pierce 1978 (Carbohydrate & energetics; enzyme; muscle metabolic profiles & fiber-type composition; intermediate glycolysis & oxidation); Shaw 1971b (Toxic compounds; DDT, DDD & DDE in fat); Shimek 1977 (Food; foraging underwater habits); Stephenson 1977 (Food; eat pismo clams; Monterey Bay, California); Stulken & Kirkpatrick 1955 (Special topic; physical investigation of mortality in captivity); Tarasoff 1974 (Special topic; thermoregulation; anatomical adaptations); Urmanov 1971 (Special

topic; angioarchitectonia in liver with reference to gall excretion system); van de Vere 1975 (Food; E.l. nereis; replenishment of food spp. within their range); Van Wagenen et al. 1981 (Food; predation on birds; Monterey, California); Wade 1975 (Food; eat pismo clams); Wilke 1957 (Food; Amchitka I.); Williams & Pulley 1983 (Haematology; haematology & blood chemistry); Williams & Siniff 1983 (Special topic; surgical implantation of radiotelemetry devices).

URSIDAE

Ursus maritimus (polar bear)

Abe & Tamai 1981 (Lipid; lipid composition of brain of giant panda & brown bear; normal and alpha-hydroxy fatty acids; cholesterol, sulfatides & gangliosides); Addison & Kolenosky 1979 (Anaesthesia; ketamine•HCl & xylazine•HCl to immobilize U. americanus); Allendorf et al. 1979 (Enzyme; haematology; serum electrophoresis); Ando et al. 1979 (Carbohydrate & energetics; lipid; milk & lactation; mineral; protein; water; general composition & chemical properties of milk components of Yeso brown bear, U. arctos yesoensis; total protein; casein & whey proteins; lactose, ash, Ca, P, Na, K, Fe, Mg & specific gravity); Anonymous 1973 (Toxic compounds; PCB); Azizi et al. 1979 (Endocrinology; winter sleep on pituitary-thyroid axis in U. americanus; serum thyroid hormones; TSH, TRH, T_4 & T_3); Baker et al. 1963 (Lipid; proximate composition; milk & lactation; fat constitution; milk), 1967 (Milk & lactation; protein; electrophoresis of protein fractions of milk), 1963a (Carbohydrate & energetics; milk & lactation; carbohydrate content in casein); Baker & Lauer 1971 (Carbohydrate & energetics; milk & lactation; carbohydrate content of casein; sialic acid, hexose & hexosamine); Beeman et al. 1974 (Anaesthesia; M99 Etorphine for immobilizing black bears); Belopolskii 1935 (Lipid; oils of polar bear & Okhotsk brown bear); Best 1975 (Nutrition; aspects of nutrition), 1976 (Nutrition; carbohydrates & energetics); Borisov 1969b (Haematology; protein; also U. arctos; antigenic properties of serum proteins); Brockerhoff et al. 1966a (Lipid; positional distribution of fatty acids in fats); Bowes & Lewis 1974 (Toxic compounds; PCB, DDE & DDT in liver fat); Chernikin 1978 (Food; brown bear eat ringed seals & fish; N.W. shores of Lake Baikal); Christiansen 1981 (Food; foraging on dead Balaena mysticetus); Clausen et al. 1974 (Toxic compounds; Tindane, heptachlor epoxide, aldrin, PCB & DDE in adipose); Dangerfield et al. 1976 (Nutrition; protein; lipids; lipoproteins & atherosclerosis); Dorrance & Roy 1978 (Special topic; aversion conditioning of black bears to LiCl & $CuSO_4$; failed); Doutt 1940 (Vitamin; toxicity of livers); Eley 1976 (Food; eat pinnipeds, Alaska); Engelhardt 1983 (Toxic compounds; thermoregulation; bibliography; review; oil spill on thermoregulation, dermal toxicity, neurotoxicity & hemotoxicity); Ferguson & Folk 1971 (Haematology; lipid; plasma-free fatty acids); Eubanks et al. 1976 (Carbohydrate & energetics; mineral; serum Ca, P & glucose of U. americanus); Flyger et al. 1967 (Care; special topic; capturing & handling; ecological research); Foresman & Daniel 1983 (Endocrinology; reproduction; plasma progesterone concentrations in pregnant & non-pregnant U. americanus; delayed implantation); Franzmann et al. 1981 (Haematology; β-endorphin levels in blood; U. americanus; U. arctos); Freeman 1973 (Food; eat Delphinapterus leucas; Canadian Arctic); Furnell & Oolooyuk 1980 (Food; eat ringed seal, Pusa hispida in ice-free water); Gershbein & Singh 1964 (Lipid; liver lipids); Haigh et al. 1983 (Anaesthesia; immobilization with carfentanil); Halloran & Pearson 1972 (Lipid; mineral; haematology; protein; U. arctos; S.W. Yukon, Canada; blood chemistry; creatinine, uric acid, urea, Ca, P, Na, Na & Cl; kidney function; lipid metabolism); Harington 1968 (Special topic; denning habits); Hebert et al. 1980 (Anaesthesia; U. arctos horribilis; immobilization with etorphine•HCl); Hensel & Sorensen 1980 (Special topic; age determination in live animals); Heyland & Hay 1976 (Food; attack juvenile beluga); Indian & Northern Affairs Canada 1981 (Toxic compounds; effects of crude oil); Jenness et al. 1972 (Milk & lactation; comparative aspects of milk from 4 bear spp.); Jonkel 1969 (Special topic; research in Canada); Kaduce et al. 1981 (Haematology; lipid; protein; characterization of plasma lipids; fatty acid composition of phospholipids; lipoproteins (LDH); cholesterol); Kingsley 1979 (Food; special topic; fitting of von Bertalanffy growth equations to age and weight data; eat seals); Knudsen 1978 (Food; summer food; North Twin I., James Bay, Canada); Kuzin & Maminov 1981 (Myoglobin; haematology; morphology of blood & arterial system); Larsen 1971 (Anaesthesia; special topic; capturing, handling & marking); Lauer & Baker 1977 (Milk & lactation; protein; amino acid composition of casein); Leatherland & Ronald 1981 (Endocrinology; thyroid hormones of captive & feral); Lee et al. 1977 (Enzyme; haematology; lipid; mineral; protein; carbohydrate & energetics; blood values; erythrocyte & leukocyte counts; hematocrit, hemoglobin; BUN, total protein, cholesterol, Na, K, Cl, P, glucose, glutamic pyruvic transaminase, glutamic oxaloacetic transaminase, alkaline phosphatase & lactic dehydrogenase), 1968 (Anaesthesia; immobilization with ketamine•HCl & xylazine•HCl); Lentfer 1968 (Anaesthesia; special topic; technique for immobilization & marking), 1976 (Toxic compounds; environmental contaminants), 1983 (Special topic; movements from mark & recovery; Alaska); Lentfer et al. 1980 (Special topic; population characteristics); Lewis & Lentfer 1967 (Vitamin; vitamin A content of liver); Litchfield 1968 (Lipid; predicting of positional distribution of 22:6ω3 & 22:5ω3 in triglycerides); Lundberg et al. 1976 (Protein; protein metabolism before & during hibernation of U. americanus); Manning 1971 (Special topic; geographic variation); McMillan et al. 1976 (Endocrinology; annual testosterone rhythm of U. americanus); Oritsland 1970 (Thermoregulation; temperature regulation); Oritsland & Lavigne 1976 (Thermoregulation; radiative surface tem-

peratures of exercising bears); Patenaude 1979 (Anaesthesia; evaluation of fentanyl citrate, etorphine•HCl & naloxone•HCl in captive); Roberge & Charbonneau 1971 (Enzyme; protein; activities of urea cycle enzymes of liver of brown bear; carbamyl phosphate synthetase & transferase, arginosuccinate synthetase, arginosuccinase & arginase); Rodahl 1949a (Vitamin; toxic effect of liver); Rodahl & Moore 1943 (Vitamin A content & toxicity of liver); Russell 1975 (Food; food habits in summer & autumn; James Bay & S.W. Hudson Bay); Schweinsburg et al. 1981 (Special topic; abundance, distribution & population structure in central Arctic islands, N.W.T.), 1982 (Special topic; distribution, movement & abundance; Lancaster Sound, N.W.T.); Seidel 1980 (Care; haematology; special topic; clinical contribution to haematology; puncture technique to obtain blood sample & processing of blood); Smith 1980 (Food; special topic; eat Pusa hispida & Erignathus barbatus); Stirling & Archibald 1977 (Food; eat Pusa hispida & Erignathus barbatus); Stirling et al. 1975 (Special topic; distribution & abundance; E. Beaufort Sea), 1976 (Special topic; population ecology in N. Canada), 1975a (Special topic; food; research in Beaufort Sea), 1977b (Special topic; ecology along W. coast of Hudson Bay); 1978 (Special topic; population ecology along proposed Arctic islands; gas pipeline route); 1980 (Special topic; population ecology studies; S.E. Baffin I.); 1981 (Special topic; habitat preferences & distribution in Canadian Arctic), Stirling & Jonkel 1972 (Special topic; general); Stirling & Kiliaan 1980 (Special topic; population ecology studies, N. Labrador); Stirling & McEwan 1975 (Food; carbohydrate & energetics; caloric value of Pusa hispida in relation to their ecology & hunting behaviour); Sukhomlinov et al. 1974 (Myoglobin; comparison of structures); Uspenski & Belikov 1976 (Special topic; research in USSR); Uspenski & Kupriyanov 1980 (Special topic; research & conservation in USSR, 1975-1976); Wortman & Larue 1974 (Care; hand rearing of cubs).

Inuit (Eskimo)

Bang & Dyerberg 1972 (Lipid; protein; haematology; plasma lipids & lipoproteins, W. Greenland); Bang et al. 1976 (Food; proximate composition; Greenland), 1971 (Lipid; protein; hematology; plasma lipid & lipoprotein patterns; W. Greenland), 1980 (Food; lipid; proximate composition; eat seals; ash, water, protein & fat; fatty acids composition; cholesterol & carbohydrate; N.W. Greenland); Bergan & Bell 1978 (Food; nutrition; vitamin; biochemical assessment of nutritional status; Alaska; thiamine & riboflavin deficiencies); Brooks 1953 (Food; special topic; importance of walrus to Inuit economy); Dyerberg & Bang 1979 (Lipid; nutrition; lipid metabolism; atherogenesis; role of prostaglandins of ω3 family in Inuit), 1979a (Haematology; lipid; haemostatic function & platelet polyunsaturated fatty acids), 1975 (Haematalogy; lipid; fatty acid composition of plasma lipid; Greenland), 1977 (Haematology; lipid; plasma cholesterol concentration; W. Greenland), 1978 (Lipid; haematology; eicosapentaenoic acid & prevention of thrombosis & arteriosclerosis); Dyerberg & Jorgensen 1982 (Lipid; bibliography; review; marine oils & thrombogenesis); Galster 1976 (Nutrition; toxic compounds; Hg in Alaskan mothers & infants); Geraci & Smith 1979 (Vitamin; food; vitamin C in their diet, Holman N.W.T., Canada); Harris et al. 1983 (Lipid; nutrition; Inuit diet reduces plasma lipids & lipoproteins; seals are high in 20:5ω3 & 22:6ω3); Hoppner et al. 1978 (Nutrition; food; nutrient levels of some food; Arctic Bay, N.W.T.); Hoygaard 1940 (Nutrition; studies on nutrition & physio-pathology); Hoygaard & Rasmussen 1939 (Vitamin; food; vitamin C sources in diet); Marquette 1977 (Special topic; catch by Alaskan Inuit of Balaena mysticetus with review of fishery 1973-1976 & a biological summary of spp.); Marquette & Braham 1982 (Special topic; gray whale distribution & catch; Alaska); Serat et al. 1977 (Toxic compounds; haematology; DDT & DDD in blood & diet); Sinclair 1981 (Lipid; special topic; importance of essential fatty acids of linolenic & linoleic families in their diet; prostaglandins); Smith & Armstrong 1975 (Pusa hispida; Erignathus barbatus; Hg in seals & principle food; Holman Bay, N.W.T.); Sonnenfeld 1957 (Food; changes in subsistence of Barrow Inuit); Spencer 1959 (Special topic; ecology & society); Wo 1973 (Nutrition; vitamins; lipids; nutritional status in relation to fatty acids, vitamins A & E); Wo & Draper 1973 (Vitamin; food; eat seal; vitamin E levels).

SUBJECT INDEX

ANAESTHESIA

Backhouse 1964 (Marine mammals; small); Beeman et al. 1974 (Ursus americanus; etorphine immobilization); Briggs et al. 1975 (Mirounga angustirostris; ketamine immobilization); Cline et al. 1969 (Lobodon carcinophagus; Leptonychotes weddelli; Mirounga leonina; immobilization & blood collecting); Engelhardt 1977b (Phoca groenlandica; immobilization; ketamine intravenous injection dose); Finer 1954 (Phoca vitulina); Flyger 1964 (Cetacea; succinylcholine chloride); Flyger et al. 1965 (Leptonychotes weddelli; effect of 3 immobilizing drugs), 1967 (Ursus maritimus; capturing & handling; ecological research); Gentry & Johanson 1978 (Callorhinus ursinus; physical restraint for immobilizing); Geraci 1973 (Pinnipedia; appraisal of ketamine); Geraci et al. 1981 (Pinnipedia; safe methods for repeatedly immobilizing); Haigh et al. 1983 (Ursus maritimus; carfentanil); Haigh & Stewart 1979 (Cystophora cristata; narcotics); Hebert et al. 1980 (Ursus arctos; etorphine•HCl); Jewell & Smith 1965 (Hallchoerus grypus); Keyes 1966 (Callorhinus ursinus; drugs used); Lamson et al. 1951 (Marine mammals; modification of barbituate anaesthesia by glucose, intermediary metabolites & certain other substances); Larsen 1971 (Ursus maritimus); Lee et al. 1968 (Ursus maritimus; ketamine•HCl & xylazine•HCl); Leith & Brain 1968 (Pinnipedia); Lentfer 1968 (Ursus maritimus); Ling & Nicholls 1963 (Mirounga leonina; succinylcholine chloride); Ling et al. 1967 (Mirounga leonina; succinylcholine chloride); Marakov 1963 (Callorhinus ursinus; electric current); Mate et al. 1983 (Zalophus californianus; Mirounga angustirostris; electroimmobilization); McCormick 1969 (Cetacea; porpoise; relationship of sleep, respiration &

anaesthesia); McDonnell 1971 (Pinnipedia; physiological & pharmacological consideration), 1972 (Pagophilus groenlandicus); McGrath et al. 1981 (Zalophus californianus; upper airway); Medway et al. 1970b (Lagenorhynchus obliquidens; Tursiops truncatus; effect of prolonged halothane anaesthesia protein; enzymes); Meshcherskii et al. 1978 (Cetacea; porpoise; anaesthesia without blocking respiratory capacity), 1980 (Pagophilus groenlandicus; newborn); Mortelsman 1971 (Marine mammals); Nagel et al. 1964 (Tursiops truncatus), 1965 (Tursiops truncatus); Nesterov 1965 (Callorhinus ursinus), 1966 (Callorhinus ursinus; experimental use of ditilinum), 1971 (Eumetopias jubatus; curare-like drug), 1973 (Pagophilus groenlandicus; narcotic drugs & ditilline in harvesting), 1973a (Pagophilus groenlandicus; sleep inducing agents & ditilline in harvesting); Parry et al. 1981 (Halichoerus grypus; several drugs); Patenaude 1979 (Ursus maritimus; evaluation of drugs in captives); Peterson 1965 (Callorhinus ursinus); Poulter 1965b (Zalophus californianus); Ridgway & McCormick 1967a (Cetacea; major surgery of porpoises), 1967b (Cetacea; porpoise; major surgery), 1971 (Cetacea; porpoise); Ridgway & Simpson 1969 (Zalophus californianus); Rieu & Gautheron 1968 (Cetacea; method of introduction of tube for anaesthesia in small dolphins); Ryding 1982 (Mirounga angustirostris; ketamine); Schevill et al. 1967 (Marine mammals; immobilizing drugs lethal to swimmers); Seal & Erickson 1969 (Marine mammals; phyencyclidine & promazine); Sinnett et al. 1981 (Phoca vitulina; cardiovascular depression & thermoregulatory disruption caused by pentothal/halothane); Thurman et al. 1982 (Arctocephalus pusillus; anaesthesia & treatment of a chronic eye infection & amputation of metartarsal bone); Trillmich 1983 (Pinnipedia; Galapagos sea lions & fur seals; ketamine-xylazine combination); Trillmich & Wiesner 1979 (Zalophus californianus).

BIBLIOGRAPHY

Addison 1982 (Marine mammals; review; organochlorine compounds & marine lipids); Anderson 1946 (Catalogue Canadian marine mammals); André 1947 (Delphinus delphis; literature review; lipid); Bagge 1975 (Phoca vitulina; Halichoerus grypus; Pusa hispida; pesticides residues, Baltic; review); Banfield 1974 (Marine mammals of Canada); Bartlett & Moulder 1976 (Pinnipedia; marine & estuarine pesticide pollution); Blix & Steen 1979 (Pagophilus groenlandicus, Pusa hispida; Callorhinus ursinus; Phoca vitulina; Phoca largha; Cystophora cristata; Erignathus barbatus; Leptonychotes weddelli; Odobenus rosmarus; newborns; review); Brinck 1947 (Odobenus rosmarus; in history of zoology); Buckley 1958 (Odobenus rosmarus; review of current knowledge); Carter 1968 (Cetacea; Pinnipedia; index and list titles), 1973 (Cetacea; Pinnipedia; index & list of titles; FRB literature); Charters 1947 (Odobenus rosmarus); Doutt 1942 (Phoca; review); Dyerberg & Jorgensen 1982 (Marine mammals; Inuit; haematology; lipid; review marine oils & thrombogenesis); Engelhardt 1983 (Marine mammals; Cetacea; Pinnipedia; Ursus maritimus; Enhydra lutus; thermoregulation; review; oil spill on thermoregulation, dermal toxicity, neurotoxicity & hemotoxicity); Erickson & Hofman 1974 (Leptonychotes weddelli; Lobodon carcinophagus; Hydrurga leptonyx; Ommatophoca rossi; Mirounga leonina; Arctocephalus tropicalis; Arctocephalus forsteri; behavior & distribution); Fairley 1972 (Cystophora cristata; Halichoerus grypus; Pagophilus groenlandicus; Phoca vitulina; Pusa hispida; Ireland); Gale 1973 (Marine mammals; neuroendocrine aspects of thermoregulation; review); Gill & Coues 1877 (Marine mammals; N. American); Gold 1981 (Cetacea; Pinnipedia; selected topics); Hoel 1952 (Pinnipedia; Canada, Newfoundland & Greenland); Hofman 1975 (Cetacea; Pinnipedia; selected topics); International Council for the Exploration of the Sea 1974 (Marine mammals; list of publications), 1978 (Cetacea; Pinnipedia; 1977 list of publications), 1979 (Cetacea; Pinnipedia; 1978 list of publications); Jensen et al. 1979 (Pinnipedia; number & identity of anthropogenic substances present in Baltic seal & their effect on reproduction; PCB & DDT on reproduction; review); Johnson 1975 (Zalophus californianus; comparative aspects of lactose digestion & synthesis; 14 ref.); Jordan & Clark 1912 (Callorhinus ursinus; enemies; review); Kawakami 1980 (Physeter macrocephalus; review on food); Kawamura 1980b (Cetacea; food of balaenopterids; review); Kooyman et al. 1981a (Marine mammals; physiology of diving; review); Korzhuev et al. 1979 (Black Sea dolphin; Tursiops truncatus; characteristics of the blood; review); Landy 1980 (Marine mammals; Pinnipedia; Cetacea; special topic; review on neoplasia); Ling 1969 (Pinnipedia; review of ecological factors affecting the annual cycle in island populations); Lovern 1964 (Marine mammals; lipids; review); Malins & Varanasi 1975 (Marine mammals; Cetacea; biochemistry of lipids of acoustic tissues; review; 85 ref.); Malins & Wekell 1970 (Marine mammals; lipid biochemistry of marine organisms; review); Mawdsley-Thomas 1973 (Marine mammals; diseases); McDonald 1914 (Pinnipedia; fur seals & other life; Pribilof I., Alaska); Nevenzel 1970 (Cetacea; occurrence, function & biosynthesis of wax esters in marine organisms); Philippi 1888 (Arctocephalus philippi; Callorhinus ursinus; Arctocephalus australis; Otaria phillippi); Reeves 1978 (Odobenus rosmarus; literature survey & status report); Reichenow 1839 (Pinnipedia; Phocidae; Phoca vitulina; Halichoerus grypus; captivity); Rice & Scheffer 1968 (Marine mammals; world list); Ridgway 1972a (Marine mammals; care; biology & medicine); Risebrough 1978 (Marine mammals; pollutants; literature review & research recommendation); Ronald et al. 1976 (Pinnipedia; annotated bibliography); Rzhavsaya & Mrochkov 1967 (Balaenoptera musculus; Balaenoptera physalus; Balaenoptera borealis; Megaptera nodosa; characterization of whale fat from different body parts; 25 ref.); Schmidly & Melcher 1974 (Cetacea; annotated checklist & key; Texas); Scholander 1965 (Pinnipedia; writings of P.F. Scholander); Selander & Johnson 1973 (Marine mammals; genetic variations among vertebrate spp.); Severinghaus 1979 (Cetacea; Pinnipedia; annotated; selected; Alaska); Severinghaus & Nerini 1977 (Cetacea; Pinnipedia; selected; annotated; Alaska); Shaughnessy & Fay 1977 (Phoca vitulina; nomenclature; review); Thompson & Hickling 1973 (Halichoerus grypus; literature of Farne I., Northumberland); Todd 1968 (Marine mammals; books & articles), 1969 (Callorhinus ursinus;

recent literature); U.S. Fish & Wildlife Service 1958 (Callorhinus ursinus; selected topics); U.S. Marine Mammal Commission 1979 (Pinnipedia; Cetacea; selected topic); Watson 1981 (Cetacea; sea guide to world's whales); Wood 1978 (Cetacea; Pinnipedia; annotated), 1980 (Cetacea; Pinnipedia; U.S. Navy's program), 1983 (Marine mammals; annotated); Woodward 1976 (Marine mammals; milk & lactation; protein; chemistry of casein; review).

BIOLOGICAL SONAR

Ackman et al. 1975a (Sotalia fluviatilis; lipid; lipids of melon, blubber & jaw; isovaleryl wax esters & diisovaleryl glycerides), 1971a (Inia geoffrensis; lipid; composition of wax esters, triglycerides & diacylglycerylethers in jaw & blubber fats); Amundin & Andersen 1983 (Phocoena phocoena; Tursiops truncatus; sound production regulation); Au & Turl 1983 (Tursiops truncatus; target detection in reverbation by echolocation); Beamish 1970 (Pinnipedia; vocalization; analytical model); Blomberg 1972 (Globicephala melaena; lipid; head oil lipid analysis & ultrasonic studies), 1974 (Globicephala melaena melaena; pristane; isovaleryl triglycerides; cholesterol esters, wax esters; head oil); Blomberg & Lindholm 1976 (Globicephala melaena melaena; variation in lipid composition & sound velocity in melon); Blomberg 1978 (Globicephala melaena; Odontoceti; functional aspects of head oil lipids); Bullock & Ridgway 1972 (Marine mammals; neurophysiological findings relevant to echoloclation); Bullock et al. 1968 (Cetacea; electrophysiological studies of central auditory mechanisms); Busnel & Dziedzic 1966 (Phocoena phocoena; metrological results of echolocation & compare with others); Evans 1973 (Cetacea; echolocation by marine & one freshwater dolphin); Gouw & Vlugter 1967 (Marine mammals; lipid; physical properties of triglyceride, ultrasonic sound properties); Hustad et al. 1971 (Marine mammal; lipid; acoustic properties of some lipids); Kadane & Penner 1983 (Tursiops truncatus; range ambiguity & pulse interval jitter echolocation); Karl et al. 1978 (Kogia breviceps; compositional topography of melon & spermaceti organ lipids; implications in echolocation; wax esters & triglyceride composition in 3 regions of melon); Litchfield & Ackman 1973 (Tursiops truncatus; chromatographic analysis of isomeric isovalerate & isoamyl wax esters); Litchfield et al. 1971 (Delphinapterus leucas; mono- and diisovaleryl triglycerides from blubber & melon oils; echolocation role), 1971b (Inia geoffrensis; Sotalia fluviatilis; lipid; comparative lipid patterns); Litchfield & Greenberg 1974 (Berardius bairdi; Delphinapterus leucas; Delphinus delphis, Globicephala melaena, Grampus griseus, Inia geoffrensis; Lagenorhynchus albirostris; Monodon monoceros; Phocoena phocoena; Phocoenoides dalli; Platanista gangetica; Stenella plagiodon; Pseudorca crassidens; Tursiops truncatus; Kogia simus; comparative lipid patterns in melon fats; Families Ziphiidae, Physeteridae & Platanistidae contain no isovalerate lipid; triglycerides & wax esters), 1979 (Inia geoffrensis; compositional topography of melon lipids; refractive collimation of echolocation sound beam); Litchfield et al. 1978 (Berardius bairdi; distinctive medium chain wax esters, triglycerides & diacylglyceryl esters in head fats), 1975 (Delphinidae; Phocoenidae; Monodontidae; Ziphiidae; Physeteridae; Platanistidae; comparative lipid patterns in accoustical & nonaccoustical fatty tissues; wax esters & triglycerides; echolocation mechanisms), 1973 (Tursiops truncatus; compositional topography of melon lipids; fat content melon (4 layers) aid in collimation of ultrasonic pulses used for echolocation); Lok & Folkersma 1979 (Mesoplodon bidens; composition of wax esters & triacylglycerols in melon & blubber fats of young; diet changes from triglyceride in milk to wax esters in natural food); Mackay 1981 (Tursiops truncatus; interaction with acoustically controlled systems aspects of frequency control learning & nonfood rewards); Malins et al. 1972 (Tursiops truncatus; biosynthesis of triacylglycerols containing isovaleric acid); Malins & Varanasi 1972 (Tursiops gilli; isovaleric acid & isopentadecanoic acid in acoustic tissue lipids; triglycerides resistant to porcine pancreatic lipase), 1975 (Cetacea; biochemistry of lipids of acoustic tissues; review); Morris 1975 (Physeter catodon; lipid structure of spermaceti organ in calf & male & female adults; lipid & fatty acid composition; buoyancy regulator; acoustic lens); Murchison 1980 (Tursiops truncatus; detection range & range resolution of echolocating); Nachtigall 1980 (Cetacea; Odontoceti; echolocation performance on object size, shape & material); Norris 1964 (Cetacea; some problems in echolocating), 1968 (Cetacea; Odontoceti; evolution of acoustic mechanisms), 1969 (Marine mammals; echolocation); Norris & Dohl 1971 (Cetacea, observations of free-swimming in schools; studies of chemistry of head porpoise oils); Norris & Harvey 1973 (Cetacea; sound transmission in porpoise head); Penner & Murchison 1970 (Inia geoffrensis; experimentally demonstrated echolocation); Pilleri 1982 (Solatia guianensis; Tursiops truncatus; Delphinapterus leucas; sense of vision of sonar field in captivity), 1983 (Inia geoffrensis; Tursiops truncatus; Cephalorhynchus commersoni; Neophocoena phocoenoides; Monodon monoceros; Delphinapterus leucas; Pontoporia blainvillei; Platanista indi; Lipotes vexillifer; sonar systems); Pilleri et al. 1982a (Delphinapterus leucas; Neophocoena phocoena; Monodon monoceros; osteological consideration in shape of sonar field; melon), 1982b (Pontoporia blainvillei; sonar emission field, osteological remarks on the pterygoid region); Poulter 1969 (Marine mammals; conditioning for testing their echolocation abilities); Robisch et al. 1972 (Monodon monoceros; differences in triaclyglycerols from acoustic tissues & posterior cranial blubber); Schusterman 1980 (Marine mammals; behavioral methodology in echolocation); Shochi et al. 1982 (Cephalorhynchus commersoni; Phocoena phocoena; Neophocoena phocoenoides; Delphinapterus leucas; characteristics & directional properties of sonar signal emitted by captive); Solntseva 1983 (Stenella attenuata; early development of acoustic analyzer peripheral region); Stirling 1973 (Pusa hispida; vocalization); Stirling et al. 1983 (Pinnipedia; underwater vocalization as a tool for studying distribution & relative abundance during wintering in high Arctic); Svizhenko 1983 (Phoca vitulina; Erignathus barbatus; Eumetopias jubata; Odobenus rosmarus; analysis of spectral characteristics of sound signals); Tavolga 1983 (Cetacea; theoretical principles for study of communication);

Thomas et al. 1983 (Leptonychotes weddelli; analysis of vocalization using underwater playback); Thompson & Friedl 1982 (Megaptera novaeangliae, Balaenoptera physalus; Balaenoptera musculus; Physeter macrocephalus; Globicephala macrorhyncha; long-term study on low frequency sounds off Oahu, Hawaii; seasonal distribution & migration); Turner & Norris 1966 (Cetacea; porpoise; discriminative echolocation); Varanasi et al. 1973 (Tursiops truncatus; isomeric composition of diisovaleroylglycerides; specificity for biosynthesis of 1,3-diisovaleroylglycerides deposited in discreet regions, acoustic window & mandibular tissue); Varanasi & Malins 1969 (Phocoena phocoena; naturally-occurring diol lipids; dialkylpentanes in jaw oil involved in acoustics); Varanasi et al. 1975 (Stenella graffmani; molecular basis for formation of lipid sound-lens in echolocating); Varanasi & Malins 1970a (Tursiops gilli; unusual wax esters from mandibular canal; contain isovaleric & little isopentyl alcohol), 1970b (Phocoena phocoena; occurrence of isovaleric acid & isopentadecanoic acid in glycerolipids from mandibular canal; ether-linked lipids), 1971 (Tursiops gilli; unique lipids; differences in triacylglycerols & wax esters of acoustic (mandibular canal & melon) & blubber tissues; isovaleric & other iso fatty acids & saturated iso fatty alcohols), 1972 (Tursiops gilli; molecular structures of diisovaleroylglyceride of acoustic tissues; role in sound transmission through lipid-protein matrices), 1974a (Tursiops gilli; structure of phospholipids & triacylglycerols containing long-chain iso acids; phospholipids (PC, PS, PE & PS) contain long-chain iso fatty acids in 2-position and triglycerides in all 3 positions), 1974b (Tursiops truncatus; distribution & metabolism of wax esters in putative acoustic tissues; highest in acoustic window), 1975 (Delphinus delphis; phosphoglycerides rich in isovaleric acid & long-chain iso acids in brain lipids); Varanasi et al. 1982 (Delphinus delphis; role of isovaleryl lipids in channeling sound in the melon); Voronov 1982 (Phocoena phocoena; frequency temporal analysis of ultrasonic calls); Voronov & Stosman 1982 (Phocoena phocoena; sound perception); Watkins 1981 (Balaenoptera physalus; activities & underwater sounds); Wedmid 1975 (Cetacea; characterization of isovaleryl lipids; NMR spectroscopy of isovaleryl triglycerides using lanthanide shift reagents); Wedmid & Litchfield 1976 (Globicephala melaena; Grampus griseus; Langenorhynchus albirostris; Lissodelphis borealis; Pseudorca crassidens; Stenella plagiodon; Sotalia fluviatilis; Tursiops truncatus; Phocoena phocoena; Phocoenoides dalli; Delphinapterus leucus; Monodon monoceros; positional analysis of triglyceride using PMR with shift reagents); Wedmid et al. 1973 (Globicephala melaena; heterogeneity of lipid composition within the cephalic melon; lipid classes, molecular species, fatty acid & fatty alcohol composition; isovaleric acid in wax ester & triglyceride), 1972 (Globicephala melaena; heterogeneity of lipid composition within cephalic melon).

CARBOHYDRATES AND ENERGETICS

Abe et al. 1965 (Cetacea; anticoagulant activity of insulin & its characteristics), 1968 (Cetacea; intestinal heparin; anticoagulant activity & clinical application); Ando et al. 1979 (Ursus arctos yesoensis, general composition & chemical properties of main components of milk; lactose); Ashwell-Erickson & Elsner 1981 (Phoca vitulina; Phoca largha; energy cost of free existence), 1981a (Phoca vitulina; Phoca largha; energy cost of free existence in the Bering Sea); Baker et al. 1963a (Ursus maritimus; carbohydrate content in casein); Baker & Lauer 1971 (Balaenoptera physalus, Ursus maritimus; Pagophilus groenlandicus; carbohydrate content of casein); Behrisch 1973 (marine mammals; molecular mechanisms of temperature adaptations of Arctic ecotherms & heterotherms); Behrisch & Elsner 1975 (Phoca vitulina; fructose diphosphatase from kidney & liver; diving), 1980a (Phoca vitulina; molecular adaptation to diving; fructose-1,6-bisphosphatase), 1980b (Phoca vitulina richardsi; molecular adaptation to diving; lactate from glycogen); Behrisch & Percy 1974 (Phoca vitulina; temperature & regulation of enzyme activity in homeo- & heterothermic tissues; regulatory properties of 1,6-diphosphogluconate dehydrogenase in adipose); Bennich et al. 1957 (Cetacea; carbohydrate content in casein); Bernstein et al. 1981 (Zalophus californianus; disaccharidase deficiency; ultrastructure of intestinal brush border membranes); Bjornhag et al. 1979 (Cetacea; Pinnipedia; relation of post-natal growth rate & milk composition; lactose); Blix et al. 1970 (Phoca vitulina; lactate dehydrogenase in diving), 1975a (Pinnipedia; brown adipose & significance in venous plexus); Blix & From 1971 (Cystophora cristata; lactate dehydrogenase in diving); Blix et al. 1975 (Pinnipeda; differential aspects of temperature on activity of lactate dehydrogenase); Brodie 1975 (Cetacea; energetics, overview of intraspecific size variation), 1979 (Halichoerus grypus; feeding behavior & energetics), 1981 (Pinnipedia; disturbance from underwater noise); Bulatov & Sadovnikova 1981 (Physeter sp.; somatotropin and its biologically-active fragment on several parameters of carbohydrate metabolism in rat diaphragmic muscle in vivo); Bunn et al. 1974 (Pinnipedia; 2,3-diphosphoglycerate; indicating hemoglobin function of mammalian red cells); Castellini et al. 1981 (Leptonychotes weddelli; Phoca vitulina; Enhydra lutris; Zalophus californianus; Stenella attenuata; glycolytic enzyme activity in tissues; lactate dehydrogenase & pyruvate kinase); Christiansen et al. 1969 (Marine mammals; uncoupling & recoupling of oxidative phosphorylation in brown adipose mitochondria); Clausen & Ersland 1969 (Cystophora cristata; respiratory properties of blood); Cornell 1983 (Orcinus orca; hematology & clinical chemistry; serum LDH, urea, creatinine, glucose & hemoglobin concentration); Costa 1978 (Enhydra lutris; ecological energetics, water & electrolyte balance), 1982 (Enhydra lutris; energy, nitrogen & electrolyte flux & sea water drinking); Costa & Kooyman 1982 (Enhydra lutris; oxygen consumption, thermoregulation & effect of fur oiling & washing); Costa & Ortiz 1982 (Mirounga angustirostris; blood chemistry hemostasis during prolonged fasting; serum glucose; lactate dehydrogenase); Cowan et al. 1981 (Callorhinus ursinus; reproductive bioenergetics); Croxall & Prince 1982 (Physeter sp.; calorific content of squid food); D'Angelo 1982 (Delphinapterus leucas; erythrocyte-transport system; protein permeability); Dargoltz et al. 1978 (Cetacea; dolphin; O_2 consumption by skin &

problem of cutaneous respiration); Davis & Kooyman 1979 (Phoca vitulina; energetics & intermediary metabolism); Dosako et al. 1983 (Callorhinus ursinus; milk composition; carbohydrate & protein); Davis 1980 (Phoca vitulina; lactate & glucose metabolism in resting & diving); Davson & Graham 1974 (Pinnipedia; comparative physiology of eye); Dhinsa et al. 1974 (Orcinus orca; Delphinapterus leucas; respiratory function of blood); Druse et al. 1975 (Zalophus californianus; metabolism of swimming); Dubois et al. 1948 (Cetacea; dolphin; intermediary carbohydrate metabolism; distribution of acid-soluble phosphorus & enzymes (cytochrome oxidase, succinate dehydrogenase, malate dehydrogenase & ATPase in heart, muscle & brain)); Eubanks et al. 1976 (Ursus americanus; serum glucose); Fedak & Anderson 1981 (Halichoerus grypus; energetics); Fisher et al. 1975 (Pusa hispida; Phoca vitulina; temperature on oxygen consumption rates in tissues); Fried et al. 1967 (Leptonychotes weddelli; α-glycerophosphate dehydrogenase & glucose-6-phosphate dehydrogenase in tissues); Gallivan & Ronald 1981 (Pagophilus groenlandicus; apparent specific dynamic action); Gaskin 1978 (Cetacea; form & function of digestive tract & associated organs in relation to metabolic rates & specific energy budgets); George 1974 (Pinnipedia; structural & metabolic adaptations of muscle); George & Ronald 1973 (Pagophilus groenlandicus; ultrastructure & metabolic adaptation of skeletal muscle), 1975 (Pagophilus groenlandicus; metabolic adaptations in skeletal muscle in diving; glycogen energy); Geraci et al. 1969 (Delphinapterus leucas; Tursiops truncatus; serum constituents; lactic acid; glutamic pyruvic transaminase), 1979 (Pusa hispida; age, condition, sampling time & method on plasma chemical constituents in free-ranging, Herschel I., Yukon; glucose); Gregory et al. 1955 (Balaenoptera sibbaldi; Balaenopterus musculus; composition of milk; lactose); Guderley & Bouchard 1982 (Pusa hispida; isozymic differentiation of cardiac & muscle pyruvate kinase); Harkness & Grayson 1969 (Tursiops truncatus; erythrocyte metabolism; 2,3-diphosphoglyceric acid; glucose via hexose monophosphate shunt; phosphoglyceric cycle; glucose-6-phosphate dehydrogenase); Hart & Irving 1959 (Phoca vitulina; energetics in air & water with seasonal changes); Hashimoto & Ludowieg 1968 (Cetacea; protein polysaccharides from nucleus pulposus of intervertebral disks); Hashimoto et al. 1963 (Cetacea; dextro-rotatory polysaccharides of high anticoagulant activity from lung & intestine), 1967 (Cetacea; heparin); Hinga 1979 (Cetacea; food requirements; basal metabolism); Hochachka & Somero 1973 (Marine mammals; strategies of biochemical adaptation); Hochachka 1973 (Phoca vitulina; multiple-end products of anaerobiosis in diving), 1981 (Marine mammals; diving metabolic & physiological mechanisms); Hochachka et al. 1977 (Leptonychotes weddelli; pulmonary metabolism during diving; conditioning blood for the brain); Hochachka & Murphy 1979 (Marine mammals; metabolic status during diving & recovery); Hochachka et al. 1979 (Leptonychotes weddelli; unusual maternal-fetal blood glucose concentrations during resting & fasting), 1975 (Phoca vitulina; Zalophus californianus; multiple end-products of anaerobiosis; carbohydrate to pyruvate & lactic acid; amino acids to succinate); Inoue & Miyawaki 1973 (Cetacea; variations in hexuronic acid composition in heparin & heparin fractions); Irving 1935b (Pinnipedia; respiration), 1939 (Marine mammals; respiration in diving; review), 1964a (Marine mammals; comparative anatomy & physiology of gas transport mechanisms); Irving & Hart 1957 (Phoca vitulina; Pagophilus groenlandicus; metabolism & insulation as seals as bare-skinned); Irving et al. 1935b (Marine mammals; metabolism in winter & summer; Alaska), 1935c (Pinnipedia; respiratory metabolism), 1935d (Pinnipedia; respiratory characteristics of the blood), 1935e (Phoca vitulina; respiratory metabolism & adjustment to diving), 1941 (Tursiops truncatus; respiration); Jarrell 1981c (Phoca vitulina; aerobic-anaerobic theory of LDH isozyme function & application to diving function); Jenness & Odell 1978 (Kogia breviceps; composition of milk; lactose & citrate); Johnson 1975 (Zalophus californianus; comparative aspects of lactose digestion & synthesis; lactose-metabolizing enzymes in milk & mammary gland; disaccharidases; α-lactalbumin); Johnson et al. 1972 (Zalophus californianus; lactose synthetase in mammary gland; galactokinase, galactose transferase & galactose-1-phosphate; no lactose); Kari & Kauranen 1978 (Mirounga angustirostris; metabolism & recycling of glucose); Keith et al. 1979 (Mirounga angustirostris; metabolism & recycling of glucose), 1980 (Mirounga angustirostris; intermediary metabolism during starvation); Keiver & Ronald 1981 (Pagophilus groenlandicus; digestible energy); Kerem et al. 1971 (Phoca vitulina; anaerobic metabolism of brain during latter stages of maximum dive), 1973 (Leptonychotes weddelli; tissue glycogen levels; possible adaptation to asphyxial hypoxia; glycogen content of skeletal muscle, heart, brain & cortex of unborn, month old & adult); Kerry & Messer 1968 (Arctocephalus tasmanicus; Arctocephalus forsteri; Mirounga leonina; intestinal glycosidases; pancreatic amylase, low intestinal lactase, sucrase, trehalase & erythrocyte hexose-1-phosphate; UDP-glucose pyrophosphatase & uridyl transferase; lactose in A. tasmanicus milk); Keyes et al. 1971a (Callorhinus ursinus; urine analysis); Kimura 1974 (Cetacea; spp. specificities of heparins; electrophoresis); Kleiber 1965 (Marine mammals; respiratory exchange & metabolic rate); Kooyman et al. 1980 (Leptonychotes weddelli; aerobic & anaerobic metabolism during voluntary dives; hemoglobin concentration; lactic acid, glucose & gases), 1983 (Leptonychotes weddelli; aerobic diving limits; lactic acid, O_2 stores & body size); Kosakai & Yosizawa 1982 (Cetacea; heparin; derivatives; HPLC); Kretchmer & Sunshine 1967 (Eumetopia jubata; Zalophus californianus; intestinal disaccharide deficiency); Kretchmer 1971 (Marine mammals; historical perspective on lactose & lactase); Krogh 1941 (Marine mammals; comparative physiology of respiratory mechanism); Krogh & Iversen 1968b (Callorhinus ursinus; Histriophoca fasciata; Phoca vitulina; Eumetopias jubata; Odobenus rosmarus; metabolism); Kruse 1975 (Zalophus californianus; swimming metabolism); Kruse et al. 1975 (Zalophus californianus; swimming metabolism); Lamson et al. 1951 (Marine mammals; barbituate anaesthesia modifies glucose intermediary metabolism & other substances); Lapennas & Reeves 1982 (Halichoerus grypus; respiratory properties of blood); Lavigne & Stewart 1979 (Pagophilus groenlandicus; energy content in placentas); Lavigne et al. 1982 (Pagophilus groenlandicus; changes in composition & energy content of milk

during lactation), 1967 (Pinnipedia; bioenergetics); Lee et al. 1977 (Ursus maritimus; blood values; glucose; lactic dehydrogenase); Lenfant et al. 1968 (Orcinus orca; respiratory function); Lenfant et al. 1970a (Pinnipedia; Enhydra lutris; O_2 storage & gas capacity); Liggins et al. 1980 (Leptonychotes weddelli; fetal cardiovascular & metabolic responses to simulated diving); Lloyd et al. 1963 (Balaenoptera physalus; cartilage amino polysaccharide sulfates); Ludowieg et al. 1972 (Physeter catodon; Balaenoptera physalus; composition of nucleus pulposus during development & ageing); Luecke et al. 1975 (Zalophus californianus; mathematical biothermal model); Margni et al. 1971 (Leptonychotes weddelli; seroproteins, glycoproteins, lipoproteins & immunoglobulins); Mathai et al. 1963 (Zalophus californianus; galactose metabolism; galactokinase; galactose-1-phosphate transferase); Matsuno 1964 (Balaenoptera physalus; lung heparin; anticoagulant & lipemia-clearing activities); Matsuno & Hashimoto 1964 (Cetacea; assay of anticoagulant unit of α-heparin; newly isolated from whale & intestine & its toxicity); Matsuura & Whittow 1973 (Zalophus californianus; Phoca vitulina; oxygen uptake during exposure to heat); McAlister 1981 (Callorhinus ursinus; heat loss & energy consumption); McDermid & Bonner 1975 (Phoca vitulina; Halichoerus grypus; red cell & serum protein systems; phosphoglucomutase; electrophoresis of enzymes); McDermid et al. 1972 (Mirounga leonina; electrophoresis of plasma & red cell proteins & enzymes; phosphoglucomutase, acid phosphatase, phosphohexose, isomerase & lactate & phosphogluconate dehydrogenases); Medway 1974 (Eschrichtius robustus; plasma coagulation factor); Medway & Geraci 1972b (Tursiops truncatus; distribution of glucose); Messelt & Blix 1973 (Pusa hispida; amylase in salivary gland); Miller et al. 1972 (Phoca vitulina; metabolism & temperature regulation in newborn & developing), 1976 (Phoca vitulina; oxygen uptake & temperature regulation); Miller 1978 (Callorhinus ursinus; energetics in relation to climate & food resources, Bering Sea), 1978a (Callorhinus ursinus; energetics in relation to climate & food resources; Bering Sea); Miller & Irving 1975 (Phoca vitulina; metabolism & temperature regulation); Murdaugh & Jackson 1962 (Pinnipedia; heart rate & blood lactic acid concentration during experimental diving); Murdaugh et al. 1968 (Pinnipedia; APT-2,3-diphosphoglyceric acid ratios in erythrocytes); Murphy et al. 1980 (Leptonychotes weddelli; metabolic activities of heart, lung & brain during diving & recovery); Murphy & Hochachka 1979a (Leptonychotes weddelli; metabolic activity of lung, heart & brain during simulated diving), 1981 (Leptonychotes weddelli; activities of glycolytic & oxidative enzymes; heart, brain & lung of unborn); Nagasawa 1968 (Cetacea; heparin; anticoagulant activity); Nagasawa et al. 1964 (Balaenoptera physalus; heparin); Naumov & Chekunova 1980 (Lobodon carcinophagus; energy requirements; eat crustaceans, yearly consumption); Numachi 1970 (Marine mammals; lactate & malate dehydrogenase isozyme patterns); Ohata et al. 1977 (Callorhinus ursinus; metabolism); Oritsland 1977 (Pinnipedia; model of energy balance); Oritsland & Ronald 1975a (Pagophilus groenlandicus; energetics of free diving); Oritsland & Smith 1976 (Pusa hispida; energy balance; effect of crude oil on fur); Ortiz et al. 1978 (Mirounga angustirostris; water & energy flux in pups fasting under natural conditions); Ototani et al. 1981 (Cetacea; comparative studies on structures of highly active & relatively inactive heparins), 1982 (Balaenoptera physalus; structure & biological activity of heparin octasaccharide using chemical, C-13 NMR, enzymic & biological studies); Owen & Hochachka 1974 (Cetacea; purification & properties of dolphin muscle asparate & alanine transaminases & their possible role in energy metabolism in diving); Palimeter 1969 (Marine mammals; what regulates lactose content in milk?); Parsons et al. 1981 (Pusa hispida; minimal energy requirements); Peak et al. 1971 (Leptonychotes weddelli; Arctocephalus pusillus; comparison of lactate dehydrogenase isozymes); Peaker & Goode 1978 (Arctocephalus gazella; composition of milk; lactose; citrate; 0-26 days post partum); Perez & Mooney 1981 (Callorhinus ursinus; reproduction, energetics & food consumption during lactation); Ponganis & Pierre 1978 (Zalophus californianus; Enhydra lutris; muscle metabolic profiles & fiber-type composition; intermediary glycolysis & oxidation); Ridgway et al. 1969 (Tursiops truncatus; respiration & deep diving); Riedman & Ortiz 1979 (Mirounga angustirostris; change in milk composition during lactation; reducing sugars); Robin 1966 (Pinnipedia; mitochondria); Robin et al. 1971 (Phoca vitulina; cation transport & energy metabolism in high Na & low K erythrocytes), 1980 (Phoca vitulina; depressed energy & oxygen requirements; diving), 1981 (Phoca vitulina; glucoregulation & simulated diving), 1965 (Phoca vitulina; energy exchange during diving), 1968 (Phoca vitulina; energy metabolism in erthyrocyte); Schmidt et al. 1971 (Callorhinus ursinus; lactose synthetase activity in milk); Scholander 1940 (Marine mammals; respiratory function in diving); Scholander et al. 1950 (Phoca vitulina; Cystophora cristata; adaptation to cold in Arctic; basal metabolic rate), 1942a (Pinnipedia; aerobic & anaerobic changes in muscles during diving), 1942b (Cystophora cristata; Halichoerus grypus; Phoca vitulina; temperature & metabolism during diving); Shapunov 1973 (Tursiops truncatus; food requirements & energy balance); Shaw 1971a (Tursiops truncatus; neutral carbohydrates in milk; lactose, D-glucose, myo-inositol & scyllo-inositol); Shergin et al. 1967 (Pinnipedia; chemical composition of hairless seal milk; sugar contents); Shoubridge et al. 1976 (Balaenoptera physalus; Balaenoptera borealis; Balaenoptera musculus; Megaptera novaeangliae; Physeter catodon; lactate dehydrogenase isozyme patterns of brain & muscle in anoxia; biochemical adaptation to diving); Shun'ichi et al. 1983 (Callorhinus ursinus; composition of milk; carbohydrates & protein); Simon et al. 1974 (Phoca vitulina; Leptonychotes weddelli; Zalophus californianus; biochemical basis for differences in maximal diving time); Sordahl et al. 1983 (Phoca vitulina; comparative functional properties of mitochondria; cytochrome oxidase; ATPase); Spencer et al. 1967 (Orcinus orca; respiratory & cardiac activity); Stake & Spotte 1982 (Halichoerus grypus; estimate of maintenance energy requirements from birth to weaning); Stewart & Lavigne 1981a (Pagophilus groenlandicus; energetics of nursing; energy transfer & female condition); Stewart et al. 1983 (Pagophilus groenlandicus; lactose content in milk); Stirling & McEwan 1975 (Ursus americanus; Pusa hispida; caloric value

in relation to bear ecology & hunting behaviour); Storey & Hochachka 1974 (Cetacea; Pacific dolphin; glycolytic enzyme in muscle; role of pyruvate kinase in aerobic & anaerobic transitions during diving); Sunshine & Kretchmer 1964 (Zalophus californianus; Eumetopias jubata; no intestinal disaccharidases; trehalase, maltase, cellobiase & no lactase in pups); Suzuki et al. 1983 (Delphinus delphis; vitamin; enzyme; lipids; histological properties of myofibres in longissimus muscle; ATPase; glycerol-3-phosphate mendione oxido-reductase; lipid oxidative metabolism; glycolytic metabolism); Tower & Young 1973 (Balaenoptera physalus; Physeter catodon; interspecies correlations of cerebral cortical oxygen consumption, acetylcholinesterase activity & chloride content); Umminger 1975 (Pagophilus groenlandicus; body size & whale blood sugar concentrations); Vallayathan et al. 1969 (Pagophilus groenlandicus; levels of hemoglobin iron, certain metabolites & enzymes in blood; glucose; amylase, aldolase & lactate dehydrogenase); Vandenheede et al. 1973 (Leptonychotes weddelli; heart mitochondrial oxidations); Vogl & Fisher 1976 (Monodon monoceros; glycogen pools in arterial thoracic retia & their possible significance); Wells 1978 (Arctocephalus forsteri; haematology & oxygen transport; 2,3-diphosphoglycerate); William 1968 (Tursiops truncatus; glycogen in epidermis); Worthy 1982 (Pagophilus groenlandicus; energy sources, post-weaning), 1981 (Pagophilus groenlandicus; changes in energy stores during neonatal development); Worthy & Lavigne 1981 (Pagophilus groenlandicus; energy utilization, post-weaning), 1983 (Pagophilus groenlandicus; energetics of fasting & subsequent growth of weaned pups); Yoshizawa 1964 (Cetacea; heparin from organs); Young 1976 (Marine mammals; fat, energy & survival).

CARE IN CAPTIVITY

Austin & Geraci 1981 (Pusa hispida; Pagophilus groenlandicus; tissue sources & clinical application of 4 enzymes); Baker et al. 1980 (Halichoerus grypus; pathology); Bigg 1981 (Phoca vitulina; Phoca largha; handbook); Blix et al. 1973a (Cystophora cristata; Pagophilus groenlandicus; feeding & health of young); Bodrov et al. 1958 (Pinnipedia; Cetacea; dolphins; technology & techniques of treatment); Bossanyi 1947 (Phoca vitulina; keeping babies); Brankley & Cornelius 1974 (Marine mammals; book on advances of the veterinary science & comparative medicine); Brookes et al. 1969 (Zalophus californianus; in vitro chloropromazine metabolism; hepatic microsomes); Brookes & Forest 1971 (Pinnipedia; metabolism of 3H-chloropromazine in 13 spp.), 1973 (Marine mammals; chloropromazine metabolism; intraspecies variations); Brown 1962 (Odobenus rosmarus; health problems of calves & remarks on general progress); Brown & Norris 1956 (Cetacea; observation of captive & wild); Brown et al. 1960 (Cetacea; Pinnipedia; health problems); Bullier 1954 (Mirounga leonina; food & acclimation); Cansdale 1970 (Phoca vitulina; Halichoerus grypus; hand-rearing); Cargill et al. 1979 (Neophoca cinerea; plasma biochemical values of clinically-normal); Carlton & Schevil 1974 (Eschrichtius robustus; feeding); Carnio et al. 1982 (Arctocephalus pusillus; nutrition; management & breeding gestation, weaning, growth & feeding); Chapskii 1965b (Phocidae; tests on examination & diagnosis); Chuzhakina & Gudhov 1978 (Pusa caspica; feeding); Cockrill 1960 (Cetacea; pathology; veterinary study); Colgrove et al. 1975 (Cetacea; necrotic stomatitis in dolphin); Cornell 1975 (Pinnipedia; feeding newborn); Crandall 1964 (Marine mammals); Dawe & Berard 1971 (Pinnipedia; workshop on comparative pathology of hematopoietic & lumphoreticular neoplasms); Department of Agriculture 1979 (Marine mammals; humane handling, care, treatment & transportation; rules & regulations); Engelhardt 1976 (Pinnipedia; Phocidae; methods for biopsy of tissue); Fay et al. 1979 (Pinnipedia; Cetacea; post-mortem procedures; Alaska); Flyger et al. 1967 (Ursus maritimus; capturing & handling; ecological research); Frost & Lowry 1981a (Pusa caspica; Pusa sibirica; Pusa hispida; general; handbook); Gentry 1981a (Callorhinus ursinus; handbook); Geraci 1977 (Marine mammals; manual), 1978 (Marine mammals; Cetacea; Pinnipedia; bibliography; book, general; wild & in zoos), 1978a (Pinnipedia; nutrition & nutritional disorders), 1981 (Marine mammals; bibliography; handbook), 1981a (Pusa hispida; Phoca vitulina; Callorhinus ursinus; Halichoerus grypus; Eumetopias jubata; Zalophus californianus; Pagophilus groenlandicus; dietary disorders); Geraci & Keyes 1970 (Marine mammals; veterinary medicine in conservation & management); Geraci & St. Aubin 1979 (Delphinapterus leucas; Phocoena phocoena; Tursiops truncatus; tissue sources & diagnostic value of circulating enzymes; liver, muscle & plasma alanine aminotransferase, aspartate aminotransferase, sorbitol dehydrogenase, γ-glutamyl transferase, alkaline phosphatase & creatine kinase); Geraci & Sweeney 1978 (Pinnipedia; Cetacea; clinical techniques); Greenwood 1979 (Monachus monachus; rearing orphans); Greenwood & Wild 1977 (Halichoerus grypus; fibreoptic gastroscopy); Griner 1974 (Marine mammals; diseases of zoo animals); Hubbard 1965 (Pinnipedia), 1966 (Pinnipedia), 1968 (Pinnipedia), 1969a (Marine mammals; use in biomedical research), 1969c (Marine mammals; chemotherapy); Hubbard & Poulter 1968 (Pinnipedia; models for studies in comparative biology); Irvine 1970 (Cetacea; transportation of small spp.); Johnsen et al. 1969 (Marine mammals; nutritional & health requirements for development & maintenance of conventional colonies); Keyes 1965 (Callorhinus ursinus; pathology), 1971 (Marine mammals; pathology); Kloes 1979 (Mirounga leonina; hand-rearing); Kloes & Rahn 1975 (Mirounga leonina; partially successful breeding in Berlin Zoo, Germany); Klontz 1971 (Pinnipedia; medicine; overview); Kooyman 1981 (Hydrurga leptonyx; handbook), 1981b (Lobodon carcinophagus; handbook); Lyall-Watson 1962 (Odobenus rosmarus; Zalophus californianus; Arctocephalus pusillus; Phoca vitulina; Mirounga angustirostris; hand-rearing techniques & animal milk analysis); Manton 1976 (Cetacea; nutrition of dolphins); Mattson & Steeley 1974 (Pinnipedia; simple clinical temperature-telemetry system); McKay 1970 (Marine mammal; biomedical telemetry); Mikeladze 1971 (Pusa caspica; Callorhinus ursinus; Batumi aquarium); Miller & Ridgway 1963 (Cetacea; clinical experience with dolphins & whales); Needham 1980 (Neophoca cinerea; Zalophus californianus; restraint & capture cage); Otten & Andrews 1976 (Zalophus californianus; nutrition); Otten et al. 1977 (Zalophus californianus; hand-rearing);

Patashnik & Kangas 1971 (Marine mammals; pasteurized whole fish rations); Peterson 1965 (Callorhinus ursinus; drugs for handling); Picken 1975 (Phoca vitulina vitulina; rearing and some experiments), 1979 (Phoca vitulina; behavior & growth of hand-reared seal after release to sea); Pinney et al. 1965 (Eumetopias jubata; raising of pups); Poulter et al. 1965 (Eumetopias jubata ; rearing); Ray & Schevill 1974 (Eschrichtius robustus; feeding); Reid 1976 (Hydrurga leptonyx); Reineck 1962 (Phoca vitulina; rearing of abandoned sucklings); Ridgway 1965 (Pinnipedia; medical care), 1968 (Tursiops truncatus; biomedical experimentation), 1970 (Pinnipedia; veterinarians & marine research), 1972 (Marine mammals; special topic; biology & medicine), 1972a (Marine mammals; biology & medicine); Ridgway & Harrison 1981 (Phocidae; Pinnipedia; handbook); Riviere 1978 (Phoca vitulina; molting & possible significance to exotic animal medicine); Ronald et al. 1970 (Pagophilus groenlandicus; methods of handling, molt & disease in captivity); Seidel 1980 (Ursus maritimus; clinical contribution to haematology); Smirnov 1927 (Pinnipedia; Phocidae; diagnostic remarks; N. hemisphere); Smith et al. 1973 (Phoca hispida; capture, handling & branding); Spotte 1980 (Callorhinus ursinus; acclimation, use of anabolic steroids); Spotte et al. 1978 (Phocoena phocoena; care of stranded), 1979 (Cephalorhynchus commersoni; captivity); Spotte & Stake 1982 (Hallchoerus grypus; hand-rearing from birth to weaning); St. Aubin et al. 1979 (Pagophilus groenlandicus; handling stress on plasma enzymes; creatine kinase, aspartate aminotransferase, aldolase, alanine aminotransferase, γ-glutamyltranspeptidase & leucine aminopeptidase); Stuntz 1981 (Stenella attenuata; relationship between passive behavior & captive stress); Sweeney 1973 (Pinnipedia; management of diseases), 1974a (Pinnipedia; procedures for clinical management), 1977 (Zalophus californianus; Tursiops truncatus; intratracheal injection of antibiotics); Sweeney & Geraci 1979 (Pinnipedia; Cetacea; care of strandings); Sweeney & Ridgway 1975 (Cetacea; procedures for clinical management of small spp.); Thurman et al. 1982 (Arctocephallus pusillus; anaesthetic & treatment of a chronic eye infection & amputations); Van Dyke & Ridgway 1977 (Marine mammals; diets; handbook on nutrition & food); Van Forest 1978 (Zalophus californianus; experiences & problems with reproduction; Ouwehand Zoo); Wackernagel 1968 (Marine mammals; substituted & prefabricated diets); Wortman & Larue 1974 (Ursus americanus; hand-rearing at Topeka Zoo); Zoological Society of London 1978 (Zalophus californianus; Arctocephalus doriferus; Arctocephalus pusillus; Arctocephalus australis; Phoca vitulina; Otaria byronia; Mirounga leonina; Mirounga angustirostris; Hallchoerus grypus; captivity).

DIVING

Behrisch & Elsner 1975 (Phoca vitulina; fructose diphosphatase from liver & kidney), 1980a (Phoca vitulina; molecular adaptation to diving; fructose-1,6-bisphosphatase), 1980b (Phoca vitulina richardsi; animal molecular adaptation to diving; possible role of glycerol in ischemic seal kidney); Bigg 1981 (Phoca largha; Phoca vitulina; handbook); Blix 1971 (Pinnipedia; creatine), 1976 (Marine mammals; metabolic consequences of submersion asphyxia; general); Blix et al. 1970 (Phoca vitulina; lactate dehydrogenase), 1976 (Pinnipedia; myocardial blood flow during diving), 1983 (Halichoerus grypus; Phoca vitulina largha; cardiac output & its distribution through capillaries & at rioventricular shunts); Blix & From 1971 (Cystophora cristata; lactate dehydrogenase); Blix et al. 1973 (Pinnipedia; angiographic examination); Bradley & Bing 1942 (Phoca vitulina; renal function during ischemia & pyrogenic hyperemia); Bryden & Lim 1969 (Mirounga leonina; blood parameters); Castellini 1979 (Leptonychotes weddelli; Phoca vitulina; enzymatic profile), 1981 (Marine mammal; biochemical adaptation); Cocivera 1971 (Pagophilus groenlandicus; physiological characteristics; scientific mystery); Davis 1980 (Phoca vitulina; lactate & glucose metabolism, resting & diving); Davis & Kooyman 1979 (Phoca vitulina; energetics & intermediary metabolism); Davis et al. 1983 (Leptonychotes weddelli; renal filtration rate & hepatic blood flow); Dormer et al. 1977 (Zalophus californianus; cerebral blood flow); Elsner 1969 (Marine mammals; cardiovascular adjustments); Elsner et al. 1966 (Marine mammals; cardiovascular defenses against asphyxia), 1970 (Leptonychotes weddelli; cerebral tolerance of hypoxemia when asphyxiated); Ferren & Elsner 1979 (Pusa hispida; physiology; adaptation & implications); Folkow 1982 (Marine mammals; adaptation of circulation); Gallivan 1977 (Pagophilus groenlandicus; temperature regulation & respiration); Gallivan & Ronald 1979 (Phoca groenlandica; temperature regulation); George & Ronald 1975 (Pagophilus groenlandicus; metabolic adaptation in skeletal muscle, energy from glycogen); Hance et al. 1982 (Phoca vitulina; hormone changes; plasma catecholamines); Hempleman & Lockwood 1978 (Pinnipedia; physiology of diving; thermoregulation); Hochachka 1973 (Phoca vitulina; multiple end-products of anaerobiosis), 1981 (Marine mammals; diving metabolic & physiological mechanisms); Hochachka et al. 1977 (Leptonychotes weddelli; pulmonary metabolism; conditioning blood for brain); Hochachka & Murphy 1979 (Marine mammals; metabolic status during diving & recovery); Hochachka & Somers 1973 (Marine mammals; strategies of biochemical adaptation); Hochachka & Storey 1975 (Marine mammals; metabolic consequences of diving); Hochachka et al. 1975 (Phoca vitulina; Zalophus californianus; multiple end-products of anaerobiosis); Hol et al. 1975 (Pinnipedia; selective redistribution of blood volume); Irving 1938 (Marine mammals; change in blood flow through brain & muscle during the arrest of breathing), 1939 (Marine mammals; respiration in diving; review); Irving et al. 1935e (Phoca vitulina; respiratory metabolism & adjustment to diving), 1940 (Marine mammals; studies; Jarrell 1981 (Phoca vitulina; aerobic-anaerobic theory of LDH isozyme function & its application to diving function); Kerem et al. 1971 (Phoca vitulina; anaerobic metabolism of brain during late stages of maximum dive), 1973 (Leptonychotes weddelli; glycogen content of skeletal muscle, heart & brain cortex of fetal, month old & adult; possible adaptation to asphyxial hypoxia); Kerem & Elsner 1973 (Phoca vitulina; cerebral tolerance to asphyxial hypoxia); King 1983 (Pinnipedia; general); Kooyman 1968 (Leptonychotes weddelli; analysis of behavioral & physiological characteristics rela-

ted to diving), 1981a (Leptonychotes weddelli; handbook); Kooyman et al. 1971 (Leptonychotes weddelli; pulmonary function), 1972 (Phoca vitulina; Leptonychotes weddelli; Mirounga angustirostris; blood nitrogen tension during simulated deep dives), 1978 (Leptonychotes weddelli; blood chemistry), 1981a (Marine mammals; physiology of diving; review), 1981 (Leptonychotes weddelli; late summer dives), 1983 (Leptonychotes weddelli; aerobic diving limits; lactic acid; O_2 stores; body size), Kooyman & Andersen 1969 (Marine mammals; deep diving); Kooyman & Sinnett 1982 (Phoca vitulina; Zalophus californianus; pulmonary shunt during simulated dives to depth); Kooyman et al. 1980 (Leptonychotes weddelli; aerobic & anaerobic metabolism; evidence of preferred pathways from blood chemistry & behavior; lactic acid & hemoglobin concentration; glucose & gases); Kreps 1941 (Marine mammals; physiology of diving); Ladd et al. 1951 (Phoca vitulina; filtration rate & water diuresis); Lenfant et al. 1969 (Leptonychotes weddelli; respiratory function of blood of adult & unborn), 1970 (Leptonychotes weddelli; tolerance to sustained hypoxia); Liggins et al. 1980 (Leptonychotes weddelli; fetal cardiovascular & metabolic responses to simulated diving); Murdaugh & Jackson 1962 (Pinnipedia; heart rate & blood lactic acid concentration); Murdaugh et al. 1961b (Phoca vitulina; cessation of renal function); Murphy et al. 1982 (Leptonychotes weddelli; free amino acids in blood of unborn & mother), 1980 (Leptonychotes weddelli; metabolic activities of heart, lung & brain during diving & recovery); Murphy & Hochachka 1979 (Leptonychotes weddelli; metabolic studies of adult & unborn during diving), 1979a (Leptonychotes weddelli; metabolic activity of heart, lung & brain during simulated diving), 1981a (Leptonychotes weddelli; free amino acid profiles in blood during diving & recovery); Neshumova et al. 1983 (Pusa sibirica; distribution in muscle blood supply O_2); Oritsland & Ronald 1975a (Pagophilus groenlandicus; energetics); Owen & Hochachka 1974 (Cetacea; purification & properties of dolphin muscle alanine & aspartate transaminases & their possible role in energy metabolism); Ridgway & Howard 1979 (Cetacea; dolphin; lung collapse & intramuscular circulation, evidence from nitrogen washout); Ridgway et al. 1969 (Tursiops truncatus; respiration & deep diving); Robin et al. 1981 (Phoca vitulina; glucoregulation & simulated diving), 1965 (Phoca vitulina; energy exchange), 1970 (Phoca vitulina; Leptonychotes weddelli; biochemical adaptations subserving prolonged diving); Schmidt-Nielsen et al. 1959 (Phoca vitulina; urea excretion & diving); Scholander 1940 (Marine mammals; respiratory function), 1962 (Marine mammals; physiological adaptations), 1963 (Pinnipedia; master switch to life), 1964 (Phoca vitulina; Halichoerus grypus; Cystophora cristata; Odobenus rosmarus; handbook of physiology); Scholander et al. 1942a (Pinnipedia; aerobic & anaerobic changes in seal muscle), 1942b (Cystophora cristata; Halichoerus grypus; Phoca vitulina; temperature & metabolism); Shapiro et al. 1972 (Phoca vitulina; diving on peripheral venous renin activity); Shoubridge et al. 1976 (Balaenoptera physalus; Balaenoptera borealis; Balaenoptera musculus; Megaptera novaeangliae; Physeter catodon; lactate dehydrogenase isozyme patterns in brain & muscle & anoxia); Simon et al. 1974 (Zalophus californianus; Phoca vitulina; Leptonychotes weddelli; biochemical basis for differences in maximal diving times); Sordahl et al. 1983 (Phoca vitulina; comparative functional properties of mitochondria; cytochrome oxidase); Stone et al. 1973 (Zalophus californianus; renal blood flow); Storey & Hochachka 1974 (Cetacea; Pacific dolphin; glycolytic enzymes in muscle; role of pyruvate kinase in aerobic/anaerobic transitions); Wasserman & McKenzie 1956 (Phoca vitulina; plasma volume, cardiac output & circulation time studies during dive reflex); Zapol et al. 1979 (Leptonychotes weddelli; regional blood flow during simulated diving in conscious seals).

ENDOCRINOLOGY

Aitken 1979 (Pinnipedia; fur seal tubal & uterine secretions; possible contraceptive attack); Aman 1973 (Callorhinus ursinus; gonadotrophic factors affecting onset of reproductive maturity of female), 1975 (Callorhinus ursinus; gonadotrophic factor affecting reproductive maturity in female); Amoroso et al. 1965 (Pinnipedia; reproductive & endocrine organs of fetal, newborn & adult); Arvy 1973 (Erignathus barbatus; Mirounga leonina; Phoca vitulina; Zalophus californianus; Odobenus rosmarus; Pusa hispida; adrenal glands; biochemistry); Ashwell-Erickson et al. 1981 (Phoca vitulina richardii; Phoca largha; nutritional & hormonal aspects of molting), 1981a (Phoca vitulina; Phoca largha; endocrine system; nutritional & metabolic aspects of molting); Azizi et al. 1979 (Ursus americanus; winter sleep on pituitary-thyroid axis; serum TSH, TRH, T_4 & T_3); Backhouse & Hewer 1956 (Halichoerus grypus; delayed implantation); Bartlett & Weir 1974 (Callorhinus ursinus; circulating levels of oestradiol-17β in early pregnancy estrogen surge prior to implantation of ovum); Bern & de Roos 1960 (Zalophus californianus; corticosteroid adrenals incubated in vitro); Bbe et al. 1951 (Balaenoptera musculus; Balaenoptera physalus; adrenocorticotropic hormone activity; pituitary prolactin extraction); Borruel et al. 1973 (Leptonychotes weddelli; biosynthesis of esteroids by suprarenal gland; evolutionary & ecological adaptation), 1974 (Leptonychotes weddelli; in vitro investigation of 4 radioactive corticosteroids; pregnenolone, progesterone, corticosterone & 18-hydroxycorticosterone in adrenal cortical slices); Boshier 1977 (Halichoerus grypus; corpus luteum; ova implantation); Boyd 1983 (Halichoerus grypus; luteal regression follicle growth; a concentration of some plasma steroids during lactation; progesterone; estradiol-17β; estrus); Bradley et al. 1954 (Phoca vitulina; apnea, Na, K & water loading; pitressin & mercurial diuresis); Brandt 1940 (Cetacea; hormones in ovaries, corpus luteum, spleen, placenta, kidney, thyroid & prostrate); Bulatov et al. 1980 (Physeteridae; hydrophobic peptide with growth activity from somatotropin hydrolysate), 1983 (Balaenoptera borealis; neurotropic effect of pituitary somatotropin & its fragments); Bulatov & Sadovnikova 1981 (Physeteridae; somatotropin & its biologically fragments on some parameters of carbohydrate metabolism of rat diaphragmic muscle in vivo); Canivenc & Bonnin-Laffarque 1973 (Pinnipedia; delayed implantation); Cannata & Tramezzani 1971 (Leptonychotes weddelli; neurohypophysis; electron microscope study); Chang et

al. 1972 (Cetacea; stomach gastrone preparation on peptic ulcers); Chapskii 1964a (Pusa caspica; sexual maturity of female); Chauvet et al. 1963 (Balaenoptera physalus; neurohypophyseal hormones; isolation & characterization of oxytocin & vasopressin), 1978 (Balaenoptera physalus; MSEL-neurophysin; phylogeny; amino acid sequence); Craig 1964 (Callorhinus ursinus; histology of reproduction & estrus cycle); Damasco et al. 1975 (Leptonychotes weddelli; steroids in suprarenal cortex), 1976 (Pinnipedia; 18-hydroxycorticosterone; biological effect); Daniel 1967 (Callorhinus ursinus; study on diapausing blastocyst), 1971a (Callorhinus ursinus; growth of preimplantation embryo; correlation with changes in urine protein; progesterone), 1972 (Callorhinus ursinus; blastokinin), 1974 (Callorhinus ursinus; circulating levels of 17β-estradiol during pregnancy showing an estrogen surge preceding implantation), 1975 (Callorhinus ursinus; concentrations of circulating progesterone during early pregnancy), 1981 (Callorhinus ursinus; delayed implantation due to growth inhibition of blastocyst); Daniel & Krishnan 1969 (Callorhinus ursinus; relationship between uterine fluid components & the diapausing state of blastocyts during delayed implantation); De Roos & Bern 1961 (Zalophus californianus; adrenal corticoids; adrenal corticotropin addition revealed cortisol, corticosterone, 11-dehydrocorticosterone, cortisone & aldosterone); Dogeterom et al. 1980 (Pinnipedia; presence of vasopressin, oxytocin & vasotocin in pineal gland, subcommissural organ & fetal pituitary gland); Eckstein et al. 1959 (Marine mammals; physiology of ovum implantation); Elden et al. 1971 (Callorhinus ursinus; function of pineal body; hydroxy-O-methyltransferase; photoperiodic nature of life cycle); Elizarova et al. 1982 (Balaenoptera borealis; isolation & characterization of amino acid sequence of prolactin); Enders 1963 (Marine mammals; delayed implantation); Engelhardt 1979a (Pinnipedia; Phocidae; functional roles of cortisol), 1982 (Pusa hispida; carbon metabolism & cortisol balance in oil-exposed seal; metabolism of crude oil naphalene-C-14 to water-soluble metabolites occurring on urine & plasma; hydrocarbon hydroxylase in liver & kidney; plasma cortisol); Engelhardt & Ferguson 1980 (Halichoerus grypus; Pagophilus groenlandicus; adaptive hormone changes during the post-natal period, endocrine regulation of temperature, metabolism, salt & water balance during parturition, lactation & initiation of molting; plasma T_4, T_3 cortisol, aldosterone, Na & enhanced lipolysis); Foglia & Penhos 1954 (Balaenoptera physalus; hormone content of hypophysis; thyrotropic, adrenotropic & gonadotrophic hormones of anterior hypophysis); Foresman & Daniel 1983 (Ursus americanus; plasma progesterone concentrations of pregnant & nonpregnant; delayed implantation); Freeman et al. 1975 (Pagophilus groenlandicus; steroidogenesis in vitro with & without CH_3Hg treatment in vivo; liver, kidney & spleen cortisol, corticosterone & 4-androstene-3,17-dione), 1975a (Halichoerus grypus; Pagophilus groenlandicus; effects of contaminants on steroidogenesis); Gale 1973 (Marine mammals; neuroendocrine aspects of thermoregulation; review); Geraci 1972b (Pagophilus groenlandicus, Zalophus californianus; hyponatremia & need for salt supplementation; ACTH indicates low NaCl intake); Geschwind 1966 (Balaenoptera physalus; chemistry of melanocyte-stimulating hormones); Greenwood & Barlow 1979 (Tursiops truncatus; thyroid function; male & female T_3, T_4 & thyroid-binding capacity; Grekova 1968 (Marine mammals; hydrocortisone & insulin on liver hexokinase); Griffiths et al. 1979 (Mirounga leonina; summer & winter cycles in plasma melatonin levels; pineal cycles in immature males which have marked circidian cycle in winter & change in summer); Grodsky & Forsham 1966 (Marine mammals; insulin); Gulyas & Daniel 1967 (Marine mammals; oxygen consumption in diapausing blastocysts), 1969 (Marine mammals; incorporation of labelled nucleic acid & protein by diapausing & nondiapausing blastocysts); Hachiya et al. 1973 (Marine mammals; pituitary & blood thyrotropin); Hama et al. 1964 (Balaenoptera physalus; amino acid sequence of insulin); Hance et al. 1982 (Phoca vitulina; plasma catecholamines changes in enforced diving); Harrison et al. 1962 (Phoca vitulina; growth & structure of thyroid gland); Harrison 1969a (Marine mammals; endocrine organs; hypophysis, thyroid & adrenal); Hayashi & Suzuki 1967 (Callorhinus ursinus; new biologically-active peptide in muscle); Hayashi et al. 1966 (Callorhinus ursinus; vasoactive polypeptide from muscle & its clinical applications), 1968 (Callotaria ursina, Eumetopias jubata; Arctocephalus pusillus; Callorhinus ursinus; vasodilating peptides), 1969 (Callorhinus ursinus; peripheral vasodilator); Hayashida 1969 (Marine mammals; pituitary growth hormones), 1970 (Pinnipedia; immunochemistry of pituitary growth hormone); Helle et al. 1976c (Halichoerus grypus; Pusa hispida; endocrines; environmental poisons; Baltic Sea); Hennings 1950 (Balaenoptera musculus; Balaenoptera physalus; ACTH content in pituitary hypophysis); Hertant 1971 (Marine mammals; function of gonadotrope; report of hypothalmo-hypophysis); Hiramatsu et al. 1970 (Cetacea; antagonizing substances from heart extract of vasopressin-induced myocardial hypoxia); Hoekstra & Burgers 1967 (Balaenoptera physalus; melanophore-stimulating hormones in the hypophysis; electrophoresis; identical with fat-mobilizing factor); Ishihara & Fujino 1958 (Physeter catodon; Balaenoptera borealis; insulin structure); Ito et al. 1950 (Balaenoptera borealis; adrenocorticotropic activity of pituitary gland); Jensen et al. 1939 (Balaenoptera physalus; gonadotropic activity of anterior pituitary, FSH, LH & interstitial cell stimulating hormone); John et al. 1980 (Pagophilus groenlandicus; plasma levels of growth hormones & free fatty acids of pups; seasonal change); Junquerira et al. 1973 (Pinnipedia; parotid & submandibular glands; digestive enzymes); Kabayashi et al. 1970 (Cetacea; gastrone from gastric mucosa); Kabeno 1970 (Balaenoptera physalus; glycoprotein, a gastrointestinal hormone), 1971 (Physeter catodon; distribution of gastric secretory inhibiting substance in gastrointestinal mucosal glycoprotein), 1969 (Balaenoptera physalus; isolation of gastrin & gastrone-like substance in stomach); Kawauchi et al. 1980 (Balaenoptera physalus; isolation & characterization of β-lipotropin in pituitary glands; lipolytic activity), 1978 (Balaenoptera physalus; Balaenoptera borealis; Physeter catodon; isolation & primary structure of adrenocorticotropin); Kawauchi & Tsubokawa 1979 (Balaenoptera physalus; isolation & characterization of prolactin from pituitary gland); Keyes et al. 1971b (Callorhinus ursinus; seasonal fluctuation of hydroxyindole levels in pineal

gland); Kitagawa et al. 1973 (Balaenoptera physalus, adrenergic activity in liver hydrolysate); Kristoffersen et al. 1961 (Balaenoptera physalus; identification of 20β-hydroxypregn-4-ene-3-one in luteal tissue of pregnant); Lanman 1976 (Marine mammals; delayed implantation of blastocyst; effect on developing embryo); Lantos & Borruel 1973 (Leptonychotes weddelli; biosynthesis of corticosteroids, cortisol, pregnenolone, progesterone, corticosterone & 18-hydroxycorticosterone); Lantos et al. 1974 (Leptonychotes weddelli; study of radioactive corticosteroids); Leatherland & Ronald 1981 (Ursus maritimus; plasma concentrations of thyroid hormones of captives & ferals), 1983 (Pagophilus groenlandicus; immunochemical identification of mammotropic, somatotropic, leuteotropic, folliculotropic, thyrotropic & corticotropic cells of pars distalis); Liggins et al. 1979 (Leptonychotes weddelli; high corticosteroid levels in plasma of adult & unborn; cortisol & corticoid-binding globulins; metabolic clearance rate); Malvin et al. 1971 (Tursiops truncatus; Orcinus orca; antidiuretic hormone levels, plasma ADH concentration), 1978 (Cetacea; Pinnipedia; Tursiops sp.; Eumetopia jubata; renin & aldosterone levels; regulation of salt balance & renin-angiotensin-aldosterone axis); Malvin & Vander 1967 (Cetacea; plasma renin activity; 5 spp.); McMillin et al. 1976 (Ursus americanus; annual serum testosterone rhythm); Medway et al. 1970a (Tursiops truncatus; haematologic response to administration of a corticoid (Dexamethasone)); Miyazaki et al. 1974 (Balaenoptera musculus; TSH content of protein pituitary gland); Nagasawa et al. 1956 (Balaenoptera physalus; follicular hormones; estrone & estradiol in ovary); Nishimura 1926 (Marine mammal; chemical study, adrenals); O'Farrell & Daniel 1971 (Callorhinus ursinus; estrogen binding in uteri with delayed implantations); Ostipova 1976 (Erignathus barbatus; Pagophilus groenlandicus; Phoca vitulina; histology & histochemistry of ovaries & age related changes), 1976a (Pinnipedia; phosphomonoesterases of steroid hormone producing cells); Pankov 1982 (Balaenoptera borealis; role of proteolytic enzymes in certain stages of biological action of somatotropic hormones); Pankov et al. 1982 (Balaenoptera borealis; primary structure of pituitary somatotropin), 1976a (Balaenoptera borealis; structural characteristics of cyanogen bromide fragments of pituitary somatotropin), 1976b (Balaenoptera borealis; primary structure of corticotropin; amino acid sequence), 1977 (Balaenoptera physalus; Balaenoptera borealis; amino acid sequence of corticotropins), 1978 (Balaenoptera borealis; primary structure of pituitary body hormones; corticotropin, β-lipotropin, prolactin & somatotropin; amino acid sequence); Papkoff & Li 1958 (Megaptera novaeangliae; isolation & characterization of growth hormone from anterior pituitary lobes), Perks 1977 (Callorhinus ursinus; neurohypophysis; developmental & evolutionary aspects); Perks & Vizsolyi 1973 (Pinnipedia; neurohypophysis of unborn mammals), 1974 (Pinnipedia; neuropypophyseal peptides during fetal life); Prelog & Meister 1949 (Cetacea; isolation of progesterone from corpus luteum); Racadot 1962 (Leptonychotes weddelli; comparison of several cell types of anterior lobe of pituitary during gestation & lactation); Raeside & Ronald 1981 (Phoca vitulina; plasma concentrations of estrone, progesterone & adrenocorticoids during pregnancy & after parturition); Reiter 1974 (Pinnipedia; pineal regulation of hypothalmo-pituitary axis gonadotropins); Riviere et al. 1977 (Phoca vitulina; relationship of thyroxine & cortisol to molt); Sabashnikova et al. 1972 (Cetacea; insulin from adrenal glands); Saito & Yokoyama 1954 (Phoca richardii; Balaenoptera acutorostrata; Balaenoptera borealis; Balaenoptera physalus; Orcinus rectipenna; Physeter catodon; Langerhans' islets & insulin extraction method); Sangalang & Freeman 1976 (Halichoerus grypus; plasma steroids of adults; cortisol, cortisone, corticosterone, aldosterone, 11-deoxycorticosterone & testosterone content); Sasano & Higashi 1958 (Cetacea; assay method for insulin in pancreatic extracts); Sawyer-Steffan & Kirby 1980 (Tursiops truncatus; serum steroid levels (estrogens; progesterone) in captive females in correlation with reproductive status & their use in ovulation induction in captivity); Sawyer-Steffan et al. 1983 (Tursiops truncatus; progesterone & estrogens in pregnant & non-pregnant & effects of induced ovulation); Seal & Doe 1966 (Marine mammals; role of corticosteroid-binding globulin in pregnancy); Shapiro et al. 1972 (Phoca vitulina; diving on peripheral venous renin activity); Sinha 1976 (Hydrurga leptonyx; Ommatophoca rossi; Lobodon carcinophagus; regression of Leydig cells & testosterone levels during the nonbreeding season); Sinitsyna et al. 1972 (Cetacea; isolation & characterization of growth hormone, prolactin from hypophysis); Sorimachi & Ui 1974 (Cetacea; iodoamino acid distribution in thyroglobulins); Spotte 1980 (Callorhinus ursinus; acclimation to captivity by administration of anabolic steroids); Sterling et al. 1975 (Tursiops truncatus; Lagenorhynchus obliquidens; Phocoenoides dalli; thyroid hormone metabolism; T_3 & T_4 levels); Suzuki et al. 1974 (Callorhinus ursinus; peripheral vasodilating action of peptides from skeletal muscles at different ages & sexes); Sverdrup & Arnesen 1952 (Balaenoptera physalus; anterior lobe of hypophysis investigations); Tachibana et al. 1972 (Balaenoptera physalus; toxicity of hormonal glycopeptide from stomach mucosa on rats); Takaoka et al. 1953 (Balaenoptera physalus; Physeter catodon; Pinnipedia; insulin); Tamara & Ui 1970 (Cetacea; origin of multiple components of thyroid-stimulating hormone), 1972a (Cetacea; presence & origin of multiple components of thyroid-stimulating hormone; 4 active components), 1972b (Cetacea; isolation of 4 components of thyroid stimulating hormone using electrophoresis; one is prolactin); Tamura-Takahashi & Ui 1977 (Cetacea; purification & properties of 4 biologically active components of luteinizing hormones); Tsubokawa et al. 1980 (Balaenoptera physalus; isolation & partial characterization of growth hormone from pituitary glands); Vizsolyi 1972 (Callorhinus ursinus; neurohypophyseal physiology during fetal development & pregnancy); Vizsolyi & Perks 1969 (Callorhinus ursinus; new neurohypophysial principle), 1974 (Callorhinus ursinus; isolation of vasotocin from fetal neurohypophyses); Vliegenthart 1964 (Balaenoptera physalus,; neurohypophyseal hormones; oxytocin & vasopressin; antidiuretic); Wallis 1981 (Marine mammals; pituitary growth hormone, prolactin & placental lactogen); Warn 1965 (Callorhinus ursinus; histology of reproduction & estrus cycle in maturing females); Wynston et al. 1960

(Cetacea; thyrotropin); Yadaev et al. 1982 (Balaenoptera borealis; amino acid sequence of somatotropin); Yamagawa & Nakamura 1926 (Cetacea; pancreatic insulin); Yanuras et al. 1972 (Balaenoptera physalus; teratogenic effect of hormonal substances extracted from whale gastric mucosa on rats & mice); Yoshimura et al. 1972 (Marine mammals; catecholamine in acetylcholine release during stretching of intestinal wall).

ENZYMES

Akiya et al. 1949 (Cetacea; protease & tryptase characterization from digestive organs); Allendorf et al. 1979 (Ursus maritimus; electrophoresis serum enzymes); Ananthakrishnan & McDermid 1971 (Mirounga leonina; 2 genetic variants of red cell acid phosphatase); Austin 1976 (Pagophilus groenlandicus; Pusa hispida; tissue distribution & plasma levels of 4 clinical enzymes); Austin & Geraci 1981 (Phoca hispida; Pagophilus groenlandicus; plasma & tissue sources of enzymes; activity of creatine kinase, aldolase, γ-glutamyl transferase & leucine amino peptidase; chemical application of enzymes); Baker & Nevenzel 1971 (Marine mammals; wax ester lipases); Behrisch & Elsner 1975 (Phoca vitulina; fructose diphosphatase from liver & kidney; diving), 1980a (Phoca vitulina; liver & kidney fructose 1,6-bisphosphatase in a diver; molecular mechanism of regulation; thermoregulation); Behrisch & Percy 1974 (Phoca vitulina; temperature & regulation of enzyme activity in homeo- & heterothermic tissues; regulatory properties of 1,6 diphosphogluconate dehydrogenase in adipose); Bernstein et al. 1981 (Zalophus californianus; disaccharidase deficiency; ultrastructure of intestinal brush border membranes); Blix et al. 1970 (Phoca vitulina; lactate dehydrogenase in diving); Blix & From 1971 (Cystophora cristata; lactate dehydrogenase isozymes in brain, heart & skeletal muscle; diving); Blix et al. 1975 (Pinnipedia; differential effects of temperature on lactate dehydrogenase activity of skin); Bogdanov et al. 1977 (Callorhinus ursinus; polymorphism of transferrin, alkaline phosphatase & haptoglobins, & of plasma & erythrocyte esterases; N.W. Pacific); Borisov 1981b (Balaenoptera acutorostrata; Balaenoptera borealis; Physeter macrocephalus; electrophoresis of protein isozymes from blood plasma, corpus luteum, corpus albicans & testes; lactate dehydrogenase); Brestkin et al. 1971 (Pusa hispida lagodensis; brain cholinesterases; caudate nucleus); Bricteaux-Gregoire et al. 1974 (Mirounga leonina; N-terminal amino acid; sequence of trypsinogen), 1975 (Balaenoptera acutorostrata; isolation of pancreatic ribonuclease, trypsinogen & chymotrypsinogen); Brown & Mayhall 1977 (Balaenoptera borealis; Tursiops truncatus; Zalophus californianus; urea formation in liver; ornithine-urea cycle; ornithine carbamyl transferase); Budantseva 1980 (Physeter catodon; spermaceti oil on rat enzymes (alanine amino transferase & alkaline phosphatase) and bilirubin); Castellini 1979 (Leptonychotes weddelli; Phoca vitulina; enzymatic profile); Castellini et al. 1981 (Leptonychotes weddelli; Phoca vitulina; Enhydra lutris; Zalophus californianus; Stenella attenuata; glycolytic enzyme activities in tissues; lactate dehydrogenase; pyruvate kinase); Chalmers et al. 1970 (Marine mammals; distribution of brain glutamate decarboxylase); Cheng & Parks 1972 (Phoca vitulina; nucleoside diphosphokinase isozymes in tissues); Chernoivanov & Bogdanov 1979 (Callorhinus ursinus; inherited polymorphism of blood serum peroxidase); Cornell 1983 (Orcinus orca; haematology & clinical chemistry; serum LDH, urea, creatinine, glucose & hemoglobin concentration); Costa & Ortiz 1982 (Mirounga angustirostris; blood chemistry hemostasis during prolonged fasting; alkaline phosphatase & lactate dehydrogenase); Dubois et al. 1948 (Cetacea; intermediary carbohydrate metabolism; distribution of acid-soluble phosphorus & certain enzymes in dolphin tissues; cytochrome oxidase, succinic dehydrogenase, malic dehydrogenase & ATPase in heart, muscle & brain); Elden et al. 1971 (Callorhinus ursinus; function of pineal body of pups, bulls & pregnant females; hydroxy-O-methyltransferase; photoperiodic nature of life cycle); Engelhardt 1982 (Pusa hispida; metabolism of carbon metabolism & cortisol balance in oil-exposed seal; crude petroleum naphthalene-C-14 metabolism to water-soluble metabolites occuring in urine & blood plasma; plasma cortisol); Fisher et al. 1974 (Marine mammal; erythrocyte inorganic pyrophosphatase; spp. variations); Fried et al. 1965 (Leptonychotes weddelli; shunt mechanism enzymes in tissues), 1967 (Leptonychotes weddelli; α-glycerophosphate dehydrogenase & glucose-6-phosphate dehydrogenase in tissues); Geraci et al. 1969 (Delphinapterus leucas; Tursiops truncatus; serum constituents; Ca, P, Na, Cl, urea, creatinine, uric acid, total protein, albumin, globulin, lactic acid, glutamic oxceloacetic transaminase & glutamic pyruvic transaminase); Geraci & St. Aubin 1979 (Tursiops truncatus; Delphinapterus leucas; Phocoena phocoena; enzyme sources & diagnostic study circulating enzymes, alanine aspartate aminotransferase, sorbitol dehydrogenase, γ-glutamyl transferase, alkaline phosphatase & creatine kinase); Geraci et al. 1979 (Pusa hispida; influence of age, condition, sampling time & method on plasma chemical constituents in free-ranging; Ca, PO_4, K, NaCl, cholesterol, uric acid, triglycerides, BUN, glucose, bilirubin, alkaline phosphatase & aspartate aminotransferase); Gilbert et al. 1982 (Physeter sp.; pancreatic RNAase; mapping spatial distribution in protein functions by x-ray diffraction); Grekova 1968 (Marine mammal; hydrocortisone & insulin on hexokinase activity in liver); Grillo & Sisini 1976 (Platanista indi; urea cycle enzymes of liver; carbamyl phosphate synthetase, arginase, AMP deaminase, glutamic oxaloacetic transaminase, glutamate dehydrogenase & ornithine transaminase); Guderley & Bouchard 1982 (Pusa hispida; isozymic differentiation of cardiac & muscle pyruvate kinases); Guy et al. 1976 (Mirounga sp.; activation peptide of trypsinogen); Harkness & Grayson 1969 (Tursiops truncatus; erythrocyte metabolism; glucose via hexose monophosphate shunt; phosphoglyceric cycle; glucose-6-phosphate dehydrogenase); Hussein et al. 1982 (Delphinus delphis; production of pancreatin); Irie et al. 1966 (Balaenoptera physalus; purification & properties of 2 isozymes of pancreatic ribonuclease); Ishihara 1960 (Balaenoptera musculus; Balaenoptera physalus; Balaenoptera borealis; Balaenoptera acutorostrata; Physeter catodon; stomach mucosa pepsin), 1961 (Balaenoptera acutorostrata; pancreatic lipase); Ishikawa 1949 (Physeter catodon; pancreatic proteolytic enzyme activity); Jarrell 1981 (Phoca vitulina; aero-

bic-anaerobic theory of LDH enzyme function; diving); Johnson 1975 (Zalophus californianus; lactose digestion & synthesis in mammals; lactose-metabolizing enzymes in milk); Johnson et al. 1972 (Zalophus californianus; lactose synthetase in mammary gland; galactokinase, uridyl transferase & galactosyl transferase); Junqueira et al. 1973 (Pinnipedia; parotid & submandibular glands; digestive enzymes); Juul 1967 (Marine mammals; stability of plasma enzymes during storage); Kerry & Messer 1968 (Arctocephalus tasmanicus; Arctocephalus forsteri; Mirounga leonina; intestinal glycosidases; amylase, lactase, sucrase, trehalase, uridyl transferase & UDP-glucose pyrophosphatase in milk); Klemm et al. 1976 (Pinnipedia; amino acid sequence of pepsinogens); Koide & Matsuoka 1969 (Balaenoptera physalus; pancreatic anionic chymotrypsin & trypsin), 1970 (Balaenoptera physalus; properties of pancreatic anionic chymotrypsin), 1971a (Balaenoptera physalus; properties of cationic pancreatic trypsin), 1971b (Balaenoptera physalus; properties of cationic chymotrypsin); Kretchmer 1971 (Marine mammals; lactose & lactase); Kretchmer & Sunshine 1967 (Zalophus californianus; Eumetopias jubata; intestinal disaccharidase deficiency); Lee et al. 1977 (Ursus maritimus; blood values of wild; BUN, total protein, cholesterol, bilirubin, glucose, Na, K, Cl, Mg, Ca, P, glutamic pyruvic transaminase, glutamic oxaloacetic transaminase, alkaline phosphatase & lactate dehydrogenase; physiological parameters); MacDonald 1981 (Mirounga angustirostris; increased enzyme activity in rapidly growing pups); Mathai et al. 1966 (Zalophus californianus; galactose metabolism; galactokinase galactose-1-phosphate transferase); Matsui et al. 1975a (Stenella coeruleoalba; purification & properties of diaphorase), 1975b (Stenella coeruleoalba; properties & purification of ferrimyoglobin reductase); Matsumoto 1972 (Marine mammals; ATPase activating substance from muscle hydrolysate), 1980 (Physeter catodon; ATPase activating polypeptides); Matsuoka & Koide 1966 (Balaenoptera physalus; anionic & cationic chymotrypsin); McDermid et al. 1972 (Mirounga leonina; electrophoresis of plasma & red cell proteins & enzymes; phosphoglucomutase, phosphohexose isomerase, lactate dehydrogenase, 6-phosphogluconate dehydrogenase, adenylate kinase, peptidases, diaphorase, esterases, alkaline phosphatase, hemoglobin, ceruloplasmin, haptoglobin, transferrin, albumin & prealbumin); McDermid & Bonner 1975 (Phoca vitulina; Halichoerus grypus; electrophoresis; peptidase C, phosphoglucomutase, nucleoside phosphorylase and adenylate kinase; hemopexin system); Medway et al. 1970b (Tursiops truncatus; Lagenorhynchus obliquidens, serum glutamic oxaloacetic transaminase; ornithine carbamyl transferase, alkaline phosphatase & lactic dehydrogenase; total serum protein; bilirubin); Messelt & Blix 1973 (Pusa hispida; salivary glands; no maltase); Montagna & Harrison 1957 (Phoca vitulina; specialization of the skin; sebaceous gland alkaline phosphatase, esterase & succinic dehydrogenase); Murphy 1968 (Pinnipedia; enzymatic activity & pesticide residues in tissues); Murphy & Hochachka 1981 (Leptonychotes weddelli; activities of oxidative & glycolytic enzymes of heart, brain & lung of unborn); Neilands 1947 (Marine mammals; thiaminase); Nikolaeva 1954 (Balaenoptera physalus; amino acid composition of meat; trypsin); Numachi 1970 (Marine mammals; lactate & malate dehydrogenase isozyme patterns); Osipova 1976a (Pinnipedia; phosphomonoesterases of steroid hormone-producing cells); Owen & Hochachka 1974 (Cetacea; muscle aspartate & alanine transaminases in dolphin; holes in energy metabolism in diving); Pankov 1982 (Balaenoptera borealis; role of proteolytic enzymes in certain stages of biological action of somatotropic hormones); Parks et al. 1973 (Pinnipedia; purine metabolism of primitive erythrocytes; AMP kinase, GMP kinase, nucleoside diphosphokinase, purine nucleoside orthophosphate ribosyl transferase & hypoxanthine guanine phosphoribosyl transferase electrophoresis); Peak et al. 1971 (Leptonychotes weddelli; Arctocephalus pusillus; lactate dehydrogenase isozymes of muscle); Ponganis & Pierce 1978 (Zalophus californianus; Enhydra lutris; Cetacea (porpoise); intermediary glycolytic & oxidative enzymes of the muscle); Prosturyakov 1972 (Cetacea; chymotrypsinogen content in pancreas of various spp.); Reichert 1962 (Megaptera novaeangliae; proteinases of pituitaries); Ridgway et al. 1969 (Lagenorhynchus obliquidens; Phocoenoides dalli; Tursiops truncatus; Tursiops gilli; chemical & physical characteristics of blood; serum glutamic oxaloacetic transaminase; BUN, Na, Cl, K, cholesterol & other hemological parameters); Roberge & Charbonneau 1971 (Brown bear; urea cycle enzyme activities; carbamyl synthetase & transferase, arginosuccinate synthetase, arginosuccinase & arginase); Saito & Ishihara 1956a (Cetacea; isolation & purification of pepsin), 1956b (Cetacea; solubility curve, elementary composition & optimum pH & stability of pepsin); Saito et al. 1957a (Cetacea; amino acid composition of pepsin), 1957b (Cetacea; free amino acids of peptic digests of various proteins; pepsin); Sasano & Ota 1974 (Balaenoptera physalus; Physeter catodon; pancreatic proteolytic enzymes); Sasano & Yoshiwara 1965 (Physeter catodon; utilization of pancreatic proteolytic enzymes); Schmidt et al. 1971 (Callorhinus ursinus; lactose synthetase in milk); Seal et al. 1971b (Lobodon carcinophagus; biochemical, population genetics, phylogenic & cytological studies; electrophoresis of plasma enzymes & proteins); Shaughnessy 1975b (Phoca vitulina; Phoca largha; biochemical comparison, electrophoresis of hemoglobin & lactate dehydrogenase); Shepeleva 1963a (Pagophilus groenlandicus; Cystophora cristata; secretory function of stomach), 1963b (Pinnipedia; secretory function of stomach); Shimizu & Matsuura 1962 (Stenella coeruleoalba; properties of crystalline carbonic anhydrase from erythrocytes), 1971 (Stenella coeruleoalba; metmyoglobin reductase in muscle & erythrocytes); Shirai et al. 1977 (Cetacea; purification of dolphin creatine kinase of heart & brain; creatine-ligand affinity chromatography); Shoubridge et al. 1976 (Balaenoptera physalus; Balaenoptera borealis; Balaenoptera musculus; Megaptera novaeangliae; Physeter catodon; lactate dehydrogenase isozyme patterns of brain & muscle & in anoxia while diving); Simonsen et al. 1982a (Pusa hispida; Pagophilus groenlandicus; Cystophora cristata; polymorphic enzymes in liver & muscle), 1982b (Odobenus rosmarus; electrophoresis of 21 enzymes, transferrin, albumin & proalbumin in muscle, blood & liver; Thule, Greenland); Sokolov & Radionov 1978 (Tursiops truncatus; muscle succinate dehydrogenase); Somero & Johansen 1970 (Phoca vitulina; temperature effects on enzymes

from homeothermic & heterothermic tissues; lactate dehydrogenase; pyruvate kinase); Sordahl et al. 1983 (Phoca vitulina; comparative functional properties of mitochondria; cytochrome oxidase); St. Aubin 1976 (Pinnipedia; tissue enzyme distribution in phocids); St. Aubin et al. 1979 (Pagophilus groenlandicus; handling stress on plasma enzymes; creatine kinase, aspartate aminotransferase, aldolase, alanine aminotransferase, γ-glutamyltranspeptidase & leucine aminopeptidase); St. Aubin & Geraci 1977 (Pagophilus groenlandicus; Pusa hispida; Halichoerus grypus; Delphinapterus leucas; tissue distribution & plasma levels of liver enzyme; alanine aminotransferase, aspartate aminotransferase, ornithine carbamyltransferase & sorbitol dehydrogenase; species & tissue differences); Storey & Hochachka 1974 (Cetacea; Pacific dolphin; glycolytic enzyme in muscle; role of pyruvate kinase in aerobic/anaerobic transition during diving); Stuntz 1981 (Stenella attenuata; relationship between passive behavior & captive stress; serum enzymes); Sunshine & Kretchmer 1964 (Zalophus californianus; Eumetopias jubata; absence of intestinal disaccharidases); Sushko & Emil'yanenko 1957 (Physeteridae; tryptic activity on pancreas); Suzuki et al. 1983 (Delphinus delphis; lipids; carbohydrate & energetics; histological properties of myofibers in longissimus muscle; ATPase; glycerol-3-phosphate; menadione oxido-reductase, lipid oxidative metabolism; glycolytic metabolism); Takao et al. 1949 (Balaenoptera borealis; stomach pepsin); Takaoka 1944 (Cetacea; Pinnipedia; protease); Tamiya 1977 (Pinnipedia; Otariidae; ATPase accelerating peptides of muscle), 1977a (Pinnipedia; Otariidae; ATPase accelerating peptide from muscle hydrolysate); Tamiya & Matsumoto 1979 (Callorhinus ursinus; adenosine triphosphatase accelerating peptide from muscle hydrolyzate); Tamiya et al. 1976 (Callorhinus ursinus; effect of muscle peptide on actinomyosin ativity of ATPase); Terao et al. 1979 (Cetacea; pancreatic ribonuclease ω_1); Tower & Young 1973 (Balaenoptera physalus; Physeter catodon; interspecies correlations of cerebral cortical oxygen consumption, acetylcholinesterase activity & chloride content); Usai Virdis & Casolo Pernecco 1977 (Marine mammals; glutaminase in uricotelic, ammoniotelic & ureotelic organisms); Vallayathan et al. 1969 (Pagophilus groenlandicus; levels of hemoglobin iron, certain metabolites & enzymes in blood; hemoglobin, glucose, Fe, cholesterol & lipid content; amylase, lactate dehydrogenase, aldolase, lipase & esterase activities); Worthy & Lavigne 1982 (Pagophilus groenlandicus; changes in blood properties of fasting & feeding pups after weaning, Ca, alkaline phosphatase, glutamyl pyruvate transaminase & creatine phosphokinase); Yoneda 1974 (Balaenoptera borealis; preparation & properties of carboxypeptidase A), 1980 (Balaenoptera borealis; amino acid composition of protein form of procarboxylpeptidase A); Zasypkin 1982 (Pinnipedia; Phocidae; glyoxalase I polymorphism).

FOOD

Ackman & Castell 1966 (Marine mammals; lipid; herring, isomeric monoenoic fatty acid in oil); Ackman & Eaton 1966a (Marine mammals; lipid; herring, fatty acid composition), 1966 (Balaenoptera physalus; lipid; eicosenoic & docosenoic fatty acids; eat Meganyctiphanes norvegica; effect on oil composition), 1967 (Marine mammals; lipid; Meganyctiphanes norvegica; Pandalus borealis; fatty acid composition); Ackman et al. 1970 (Marine mammals; lipid; eat Meganyctiphanes norvegica & Thysanoessa inermis; lipids & fatty acids of food & their role in food web), 1967a (Marine mammals; lipid; herring, turbot & sable fish; fatty acid composition of oils; iodine value); Ackman & Eaton 1971 (Marine mammals; lipid; Ammodytes americanus, in Nova Scotia waters; lipids & FA composition of oils); Ackman & Hansen 1967 (Marine mammals; lipid; occurrence of phytanic & pristanic acid diastereomers); Ackman et al. 1969 (Marine mammals; lipid; capelin, fatty acid composition); Aguilar 1983 (Physeter macrocephalus; organochlorine; food intake on blubber; N. Atlantic temperate waters; sex differences); Ainley et al. 1982 (Zalophus californianus; eat Merluccius productus; central California coast); Anders et al. 1967 (Pagophilus groenlandicus; E. coast of Baffin I.; economic survey); Antonelis et al. 1981 (Zalophus californianus; late spring & summer prey at San Miguel I., 1978-79); Antezana 1970 (Marine mammals; euphausiids; Chilean coast); Arseniev 1940 (Histriophoca fasciata; food habits); Avigan et al. 1966 (Marine mammals; lipid; pathway of degradation of phytanic acid by α-decarboxylation); Baker 1981 (Lissodelphis peroni; stomach contents; eat squid & fish); Bailey & Ainley 1982 (Zalophus californianus; eat Merluccius productus); Baldridge 1972 (Orcinus orca; eat gray whale); Bang et al. 1980 (Inuit; eat pinnipeds; proximate composition of food; fatty acids; cholesterol), 1976 (Inuit; proximate composition of food; Greenland); Bannister & Baker 1967 (Cetacea; feeding of baleen whales, Durban); Barnard 1959 (Marine mammals; epipelagic & under ice amphipods central Arctic basin); Barr & Barr 1972 (Orcinus orca; eat Dall's porpoise); Bartlett 1865 (Otaria brynea; food habits), 1867 (Odobenus rosmarus); Beaubier et al. 1970 (Balaena mysticetus; ecology); Benjamin & Christiansen 1978 (Hyperoodon ampullatus); Bergan & Bell 1978 (Inuit; biochemical assessment of nutritional status; vitamin levels; Alaska); Best 1982 (Balaenoptera acutorostrata); special topic; seasonal abundance, feeding, reproduction, age & growth; Durban, Antarctic); Bester & Kerley 1983 (Arctocephalus tropicalis; rearing of twin pups to weaning; food resources; growth); Betesheva 1955 (Balaenoptera physalus; feeding habits; eat Thysanoessa inermis, T. longipes, Euphausia pacifica & Calanus tonsus; Kurile I. region), 1961 (Physeter catodon; Balaenoptera physalus; Balaenoptera acutorostrata; Berardius bairdi; Balaenoptera borealis; Balaenoptera musculus; Megaptera nodosa; Orcinus orca; Kurile region), 1962 (Physeter catodon, Balaenoptera physalus; Balaenoptera borealis; Balaenoptera acutorostrata; Bairdius bairdi; Kurile area); Betesheva & Akimushkin 1955 (Physeter catodon; stomach contents; eat fish & molluscs); Blacker 1968 (Pagophilus groenlandicus; ecology of pelagic fish in Arctic water & adjacent areas); Blix et al. 1973a (Cystophora cristata; feeding & health of young); Blumer et al. 1964 (Marine mammals; lipid; pristane); Blumer & Thomas 1965a (Marine mammals; lipid; phytadienes in zooplankton); Bonner & Hunter 1982 (Arctocephalus gazella; predatory interaction with penguins, Eudytes chrysolopus & giant petrels, Macronectes spp.);

Bonham 1941 (Callorhinus ursinus; stomach contents); Bonnot 1932 (Phoca vitulina; food habits; Pacific); Braham 1974 (Zalophus californianus; San Luis Obispo County, California); Braham et al. 1977 (Balaena mysticetus; Delphinapterus leucas; Bering, Chukchi & Beaufort seas); Breen et al. 1982 (Enhydra lutris; transplants to British Columbia); Briggs & Davis 1972 (Zalophus californianus; salmon; Monterey Bay, California); Brodie et al. 1978 (Balaenoptera physalus; eat Meganyctiphanes norvegica; Nova Scotia, Canada; indicated by stomach contents, sonar & net samples), 1979 (Halichoerus grypus; density dependent changes in energetics & feeding behavior), 1981 (Pinnipedia; disturbance from underwater noise); Brooks 1953 (Pacific Odobenus rosmarus; importance to Inuit economy); Brown 1868 (Balaena mysticetus; Davis Str. & Baffin Bay); Brueggeman 1982 (Balaena mysticetus; early spring distribution; Bering Sea); Brown & Mate 1983 (Phoca vitulina; special topic; abundance, movements & feeding habits at Netarts Bay & Tillamook Bay, Oregon; eat fish; radio tagging; fecal analysis); Bryant et al. 1981 (Megaptera novaeangliae; eat krill; S.E. Alaska); Buckley et al. 1979 (Marine mammals; upwelling oceanic structure at edge of Arctic ice pack in winter); Burns 1981 (Histriophoca fasciata; handbook); Butt 1977 (Platanista minor; Indus Dera Ismail Khan, Pakistan; eat Palaemon carcinus, P. malcohmsonii, & Glossogobius giurus); Calkins 1978 (Enhydra lutris; eat clam, crab, sea stars, fish & sea urchins; Prince William Sound, Alaska); Calhaem & Christoffel 1969 (Leptonychotes weddelli; feed habits; eat Dissostichus mawsoni; McMurdo Sound, Antarctic); Carlton & Schevill 1974 (Eschrichtius robustus; in captivity); Carpenter 1977 (Marine mammals; plankton ecosystem; Indian Ocean); Castello 1977 (Orcinus orca; eat sea birds, fish, squid, skates, sharks & sting ray); Chapskii 1938 (Erignathus barbatus; Kara & Barent seas); Chernikin 1978 (Brown bear; eat fish & Pusa hispida; N.E. Lake Baikal); Christiansen 1981 (Ursus maritimus; herd fed on dead Balaena mysticetus); Clarke 1980 (Physeter macrocephalus; stomach contents; eat cephalopods in S. hemisphere); Clarke & Kristensen 1980 (Hyperoodon ampullatus; stomach contents; cephalopods); Clarke & MacLeod 1974 (Physeter macrocephalus; eat cephalopods; Vigo, Spain), 1981 (Physeter macrocephalus; eat cephalopods; Tasman Sea), 1982 (Leptonychotes weddelli; eat cephalopods, krill, amphipods, algae & Isopods); Clarke et al. 1978 (Physeter macrocephalus; eat squid; coast of Chile); Clarke & Trillmich 1980 (Arctocephalus galapagoensis; cephalopods; Galapagos I.); Clemens & Wilby 1933 (Callorhinus ursinus; British Columbia); Clemens et al. 1936 (Callorhinus ursinus; stomach contents; W. Vancouver I.); Comeau 1923 (Pagophilus groenlandicus; lower St. Lawrence Gulf, Quebec, Canada); Condy 1981b (Arctocephalus tropicalus; A. gazella; annual food consumption at Marion I., S. Pacific; eat squid & krill); Croxall & Hiby 1983 (Leptonychotes weddelli; Lobodon carcinophagus; food; Signy I.; South Orkney I.; Antarctica); Croxall & Prince 1982 (Physeter sp.; caloric content of squid); Davis et al. 1980a (Marine mammals; present & future status); 1980b (Marine mammals; present & future status in Arctic); Davis 1961 (Marine mammals; workshop; Canadian Arctic); Dawbin 1955 (Marine mammals; present & future status); 1980b (Marine mammals; present & future status in Arctic); Davis 1961 (Marine mammals; workshop; Canadian Arctic); Dawbin 1955 (Marine mammals; subantarctic marine food cycles & their relation to discontinuous plankton); Dearborn 1965 (Lepyonychotes weddelli; McMurdo Sound, Antarctic); De Baar et al. 1983 (Marine mammals; vertical flux of fatty acids in N. Atlantic); Degerbol & Freunchen 1935 (Pagophilus groenlandicus; Monodon monoceros; Fifth Thule expedition, 1921-24); De Master et al. 1982 (Zalophus californianus; eat salmon, herring, squid & shark; fishery interaction); Doan & Douglas 1953 (Delphinapterus leucas; Churchill region, Hudson Bay, Canada); Dolgopolskaya 1964 (Cetacea; dolphin; eat Black Sea decapods); Duggins 1980 (Enhydra lutris; eat sea urchins); Dunbar 1941 (Erignathus barbatus; Pusa hispida; Canadian E. Arctic), 1949 (Odobenus rosmarus; Pagophilus groenlandicus; Phoca vitulina; Pusa hispida; Arctic & subarctic); Dyche 1903 (Zalophus californianus); Eley 1976 (Ursus maritimus; eat ice-inhabiting pinnipeds; Alaska); Erlinge & Jensen 1976 (Lutra lutra; Denmark); Estes 1977 (Enhydra lutris; population estimates & feeding behavior); Estes et al. 1982 (Enhydra lutris; activity & prey selection), 1978 (Enhydra lutris; eat sea urchin; Aleutian I., Alaska); Everitt et al. 1981 (Phoca vitulina; Zalophus californianus; Puget Sound, Washington); Falla 1975 (Phocarctos hookeri (Neophoca hookeri); eat spider crab; food cycle); Fay 1952 (Odobenus rosmarus; full investigation in Pacific in 1952), 1957 (Odobenus rosmarus; history & present status), 1960 (Odobenus rosmarus; carnivorous; Arctic zoonoses), 1974 (Marine mammals; role of ice in ecology; Bering Sea), 1982 (Odobenus rosmarus divergens; ecology & biology; food in Pacific); Fay et al. 1977 (Odobenus rosmarus; impact on food resources, Bering Sea); Fedoseev 1965 (Pusa hispida; feeding habits), 1982 (Odobenus rosmarus; distribution & ecological differentiation of populations); Finley 1976 (Delphinapterus leucas; Phoca vitulina; status in central District of Franklin, N.W.T.), 1978 (Pusa hispida; behaviour & densities during haul-out in high Arctic, June 1977); Finley et al. 1974 (Balaena mysticetus; numbers & distribution in central Canadian Arctic); Finley & Evans 1983 (Erignathus barbatus; summer diet; Canadian high Arctic; eat trout, polar cod, Arctic cod, clams, cephalopods, sea anemones, sea cucumber & polychaetes; regional differences in feeding; benthic feeders); Finley & Gibb 1982 (Monodon monoceros; summer diet; Pond Inlet, N. Baffin I.), In Press (Pagophilus groenlandicus; summer diet & feeding behaviour; Canadian high Arctic); Finley et al. 1982 (Delphinapterus leucas; distribution, abundance, stock indentity, catch history & management; N. Quebec); Fiscus 1962 (Eumetopias jabatus; variety of food remains in stomach), 1980 (Marine mammals; review; interaction with salmonids); Fiscus & Baines 1966 (Zalophus californianus; Eumetopias jubata; feeding & feeding behaviour); Fiscus et al. 1980 (Lagenorhynchus obliquidens; Phocoenoides dalli; Callorhinus ursinus; California & Washington); Fisher 1952 (Phoca vitulina; status in British Columbia; Skeena River); Fisher & MacKenzie 1955 (Pinnipedia; food habits; Maritimes, Canada); Fitch & Brownell 1971 (Pontoporia blainvillei; Platanistidae; S. America; food habits); Fogg 1970 (Marine mammals; biological productivity in Antarctic); Fowler 1982 (Callorhinus ursinus; interactions with commer-

cial fisheries); Frederikhsen 1977 (Physeter catodon; eat rockfish); Freeman 1973 (Ursus maritimus; eat Delphinapterus leucas; Canadian Arctic); Frost & Lowry 1980 (Histriophoca fasciata; eat pollack & Arctic cod in spring, Bering Sea), 1981 (Cetacea; foods & trophic relationship in Bering Sea); Frost et al. 1978 (Marine mammals; food); Furnell & Oolooyuk 1980 (Ursus maritimus; eat Pusa hispida in ice-free water); Gentry & Johnson 1981 (Eumetopias jubata; eat Callorhinus ursinus); George & Paul 1970 (Marine mammals; food); Geraci & Smith 1979 (Inuit; vitamin C in diet of Inuit; Holman, N.W.T.); Gill & Hall 1983 (Eschrichtius robustus; eat Cranyon sp; seasonally; Alaska peninsula); Gill & Hughes 1971 (Balaenoptera borealis; eat Cololabis saira); Gol'tsev 1971 (Phoca vitulina; feeding); Grainger et al. 1980 (Marine mammals; biological study; food web; Brevoort Harbour, E. Baffin I.); Graybill & Hodder 1981 (Phoca vitulina; diet, Oregon); Hain et al. 1982 (Megaptera novaeangliae; feeding behavior; eat herring & sea lance; N.W. Atlantic); Hallgren & Larsson 1963 (Marine mammals; lipid; herring, pristane); Haln 1884 (Otaria byronia (=Otaria jubata); stomach contents; galets); Hamilton & Nishimoto 1977 (Tursiops truncatus; eat Mugil spp.); Hansen & Meiklen 1970 (Marine mammals; Cetacea; eat Euphausia superba; isoprenoid fatty acids from diatoms); Haque et al. 1977 (Platanista gangetica; eat fish); Hay & McClung 1976 (Monodon monoceros; N. Baffin I.; summer); Heyland & Hay 1976 (Ursus maritimus; attack on juvenile Delphinapterua leucas); Hinga 1979 (Cetacea; food requirements; basal metabolism); Hoppner et al. 1978 (Inuit; nutrition; proximate composition; nutrient levels of some foods; Arctic Bay, N.W.T.); Horner 1977 (Marine mammals; food); Hotta et al. 1969 (Cetacea; stomach contents of porpoise & dolphins); Howell 1922 (Pinnipedia; food habits); Howell & Lawrence 1930 (Eschrichtius robustus; Balaenoptera physalus; Megaptera nodosa; eat Euphausia pacifica & small fish); Johnson 1982 (Inia geoffrensis; food sharing); Johnson et al. 1966 (Balaena mysticetus; Erignathus barbatus); Jones 1981 (Phoca vitulina; Mirounga angustirostris; Eumetopias jubata; Zalophus californianus; Callorhinus ursinus; Phocoena phocoena; Phocoenoides dalli; Delphinus delphis; Langenorhynchus obliquidens; Grampus griseus; Kogia simus; food habits in N. California); Jurasz 1975 (Megaptera novaeangliae; bubble net feeding); Jurasz & Jurasz 1979 (Megaptera novaeangliae; feeding modes in S.E. Alaska; eat euphausiids, herring & capelin); Kajimura et al. 1981 (Callorhinus ursinus; food; California & Washington); Kapel 1977 (Monodon monoceros; Delphinapterus leucas; Phoca vitulina; catch in Greenland 1954-1975; year; month & region); Kato 1982 (Phoca largha; food habits of pups in pack-ice area; eat euphausiids, decapods, cephalopods, fish, squid & octopus; Sakhalin, USSR & Hokkaido, Japan); Kawakami 1976 (Physeter catodon; stomach contents; N.W. Pacific), 1980 (Physeter macrocephalus; review); Kawamura 1970 (Balaenoptera borealis; stomach contents; eat Calanus tonsus & Euphausia superba), 1971 (Cetacea; influence of chasing time on stomach contents of baleen & sperm whales), 1974 (Balaenoptera borealis; food & feeding ecology eat 23 spp. of Crustacea in S. hemisphere), 1975 (Balaneoptera physalus; available source of energy & cost of locomotion, seasonal migration), 1977 (Balaenoptera edeni; eat crustaceans in S. Pacific & Indian Ocean), 1980a (Balaenoptera brydei; stomach contents; food habits; eat crustaceans), 1980b (Cetacea; food of balaenopterids; review), 1982 (Balaenoptera physalus; B. edeni; B. brydei; B. borealis; stomach contents; food habits; N. Pacific Ocean prey distribution; zooplankton; Calanus, Euphausia, Thysanoessa, Nematoscellis, Sergestes, Vinciguerria, Scomber, Cololabis & Pseudopentaceros); Kawamura & Hamaoka 1981 (Balaenoptera edeni; eat crustaceans & gonostomatid fish, Vinciguerria nembaria; S.W. Pacific); Kenyon 1965 (Phoca vitulina; Amchitka I., Alaska); King 1983 (Pinnipedia; general); Kingsley 1979 (Ursus maritimus; eat seal); Klumov 1961 (Balaenoptera physalus; Megaptera novaeangliae; consume plankton, 1.0-1.5 metric tons/day); Knudsen 1978 (Ursus maritimus; summer food; North Twin I., James Bay, Canada); Kooyman & Davis 1981 (Arctocephalus gazella; feeding behavior); Kosygin 1971 (Erignathus barbatus nauticus; feeding in Bering Sea during spring & summer period); Kosygin & Gol'tsev 1971 (Phoca vitulina; data on morphology & ecology; Tatar Str., USSR); Krylov 1971 (Odobenus rosmarus divergens); Krylov & Medvedev 1971 (Cetacea; Pinnipedia; observations during the 13th Soviet Antarctic expedition); Kumlien 1879 (Pusa hispida; natural history of Arctic; Howgate Polar Expedition 1877-78); Laws 1977 (Pinnipedia; Cetacea; baleen; eat Euphausia superba in S. oceans); Lee 1974 (Cetacea; lipid composition of Calanus hyperborealis; Arctic Ocean; changes with season & depth); Lewis 1930 (Pinnipedia; feeding habits; Victorian coast); Ling 1969 (Pinnipedia; review of ecological factors affecting animal cycle in islands population); Lockyer 1975 (Physeter catodon; estimates of growth & energy budgets), Lockyer 1976a (Cetacea; baleen; growth & energy budgets, S. hemisphere); Loughrey 1959 (Odobenus rosmarus; preliminary investigation); Lowry et al. 1977 (Erignathus barbatus; Pusa hispida; Phoca vitulina; trophic relationships among ice-inhabiting), 1978 (Pusa hispida; Balaena mysticetus; Point Barrow, Alaska), 1979 (Erignathus barbatus; Odobenus rosmarus; carrying capacity for feeding in Bering & Chukchi seas), 1980a (Erignathus barbatus; Odobenus rosmarus; feeding in Bering & Chukchi seas & tropic interaction), 1980b (Pusa hispida; stomach contents; variability in diet in Alaska); Lowrey & Fay 1981 (Odobenus rosmarus; food; Bristol Bay, Alaska); Lowry & Frost 1981 (Odobenus rosmarus; phocids; feeding & trophic relationship in E. Bering Sea); Lowry et al. 1982 (Marine mammals; feeding habits, food requirements & status; Bering Sea); Mackintosh 1973 (Cetacea; stomach contents; post-larval krill distribution in the Antarctic), 1974 (Cetacea; stomach contents; sizes of krill eaten in Antarctic); Mackintosh & Wheller 1928 (Balaenoptera musculus; B. physalus); Magniac 1929 (Pinnipedia; eat salmon); Mansfield 1958 (Odobenus rosmarus; biology; Canadian E. Arctic), 1959 (Odobenus rosmarus; Canadian Arctic), 1966a (Odobenus rosmarus; Canadian Arctic), 1966b (Odobenus rosmarus; Canadian Arctic), 1967 (Phoca vitulina; Cystophora cristata; Arctic & E. Canada), 1973 (Odobenus rosmarus; Canada & Greenland); Mansfield et al. 1975 (Monodon monoceros; E. Canadian waters); Marquette 1977 (Balaena mysticetus; 1976 catch by Alaskan Inuit; review of fishing 1973-76; biological summary of spp.); Mathisen et al. 1962 (Eumetopias jubata; feeding habits, growth & stomach contents); Matthews 1932 (Balaenoptera

physalus; Megaptera novaeangliae; Eschrichtius gibbosus; eat lobster & krill; anomuran Crustacea); McAlister & Sanger 1975 (Pinnipedia; pinniped-finfish relationship in Bering Sea); McCleneghan & Ames 1976 (Enhydra lutris; method of prey capture; eat octopus & abalone); McCleneghan & McRoy 1979 (Marine mammals; food-web structure & fractionation of carbon isotopes in Bering Sea); McHugh 1952 (Pinnipedia; Otariidae; eat black-footed albatross); McLaren 1955a (Pusa hispida; feeding), 1958a (Pusa hispida; Canadian E. Arctic); McWilliam 1977 (Marine mammals; feed on Euphausiacae; plankton ecosystem in E. Indian Ocean); Mead 1953 (Callorhinus ursinus; Japan; eat fish); Medvedev 1971 (Delphinapterus leucas; information on feeding in Dickson region); Mercer 1975 (Globicephala melaena; eat Illex illecebrosus; Newfoundland; population of whales; annual production of squid; interaction of whales & squid); Mermoz 1977 (Tursiops truncatus; eat demersal fish; strandings, La Plata R., Buenos Aires, Argentina); Mitchell 1975 (Balaena mysticetus; trophic relationships & competition for food in N.W. Atlantic whales), 1972 (Cetacea; pigmentation & feeding); Mizue 1951 (Cetacea; special topic; Japan); Moore 1977 (Marine mammals; inorganic particulate suspensions in sea & their effect); Moors 1980 (Enhydra lutris; sexual dimorphism in body size; food habits); Morris et al. 1981 (Enhydra lutris; transplants to British Columbia); Mougin & Prevost 1980 (Cetacea; interaction with birds for food); Myers 1959 (Pagophilus groenlandicus; stomach contents, Magdalen I., Quebec); Nachtigal 1975 (Tursiops truncatus; deprivation & work rate); Nagorsen & Stewart 1983 (Kogia simus; stomach contents; Vancouver I.); Naito & Nishiwaki 1975 (Phoca vitulina; P. kurilensis; ecology & morphology in Sea of Okhotsk & N.W. Hokkaido); Naumov & Chekunova 1980 (Lobodon carcinophagus; energy requirements; yearly consumption of crustaceans); Nemoto 1970 (Balaena mysticetus; feeding patterns); Nemoto & Kasuga 1965 (Cetacea; food of baleen & right whales, Gulf of Alaska); Nemoto & Kawamura 1977 (Balaenoptera borealis; B. brydei; characteristics of food habits & distribution in N. Pacific of all baleen whales); Nemoto & Yoo 1970 (Balaenoptera borealis; eat Parathemisto gauchichaudii; Antarctic); Nerini & Oliver 1983 (Eschrichtius robustus; structure of Bering Sea benthos; eat amphipod Ampelisca macrocephala); Nikolaev & Skalkin 1975 (Phoca largha; food habits; Sakhalin I.); Nyholm 1975 (Odobenus rosmarus; observations at Spitzbergen, Norway); Okutani & Nernoto 1964 (Physeter catodon; eat squid in Bering Sea & Gulf of Alaska); Oliver et al. 1983 (Odobenus rosmarus; eat bivalves, polychaetes & crustaceans; benthic perspective; Bering Sea), 1983a (Eschrichtius robustus; eat bivalves, crustaceans & polychaetes; comparison of Bering Sea & Baja California areas); Oliver 1981 (Odobenus rosmarus; food; Bering Sea; benthic prospective); Oritsland 1977a (Lobodon carcinophagus; Hydrurga leptonyx; Leptonychotes weddelli; Ommatophoca rossi; food consumption, Antarctic pack ice); Ostfeld 1982 (Enhydra lutris; foraging strategies & prey switching; eat crustaceans & molluscs); Overholtz & Nicolas 1979 (Balaenoptera physalus; Megaptera novaeangliae; feeding on Ammodytes americanus; N.W. Atlantic); Panina 1966a (Callorhinus ursinus; food, W. Pacific), 1966b (Eumetopias jubata; Pinnipedia; nutrition; Kuril I.), 1969 (Callorhinus ursinus; feeding in Bering Sea), 1970 (Callorhinus ursinus; nutrition; Commander I.), 1971 (Callorninus ursinus; food habits & food resources, Sea of Japan), 1972 (Callorhinus ursinus; fattening as indicator of well-fed in pelagic period); Pastukhov 1969 (Pusa sibirica; nutrition), 1971 (Pusa sibirica; experimental feeding); Pastukhov et al. 1969 (Pusa sibirica; age & weight characteristics of the Baikal sculpin); Perez 1981 (Callorhinus ursinus; stomach contents); Perez & Mooney 1981 (Callorhinus ursinus; reproduction, energetics & food consumption during lactation); Perkins et al. 1982 (Megaptera novaeangliae; feeding; W. coast of Greenland & Labrador); Perlov 1975 (Eumetopias jubata; feeding in region of Kuril I., USSR); Perrin et al. 1973 (Stenella sp.; stomach contents; eat Thunnus albacares); Picken 1978 (Phoca vitulina; growth & behavior of hand-reared after release); Pike 1950 (Balaenoptera musculus; Megaptera novaeangliae; Physeter catodon; eat squid, fish & crustaceans), 1962 (Eschrichtius gibbosus; migration & feeding); Pikharev 1941 (Erignathus barbatus; feeding), 1946 (Pusa hispida); Pilleri & Gihr 1975 (Neophocoena phocoenoides; Neophocoena asiaeorientalis; Neophocoena sunamari; ecology & taxonomy); Pitcher 1977 (Phoca vitulina; food; Prince William Sound - Copper River delta area), 1980a (Phoca vitulina richardsi; Gulf of Alaska), 1980b (Phoca vitulina; stomach contents & feces indicators of food eaten), 1981 (Eumutopias jubata; stomach contents; eat fish & octopus in Gulf of Alaska); Popov et al. 1976 (Orincus orca; amino acid composition of meat; source of high quality proteins); Power & Gregoire 1978 (Phoca vitulina; predation on fish of Lower Seal Lake, Quebec); Rae 1963 (Halichoerus grypus), 1968 (Pinnipedia; Scottish waters), 1973a (Phocoena phocoena; notes on food), 1973b (Pinnipedia; observations); Ray & Schevill 1974 (Eschrichtius robustus; feeding of captive); Raymont 1963 (Marine mammals; plankton & productivity; book); Rezvov 1977 (Pusa hispida; Halichoerus grypus; food; Baltic Sea); Rice 1968 (Orcinus orca; stomach contents; feeding behavior; N.E. Pacific), 1972 (Physeter catodon; stomach contents; eat giant sea-devil, Ceratias holbolli); Risebrough et al. 1976 (Hydrurga leptonyx; transfer of PCB; Antarctica); Robison & Craddock 1983 (Lagenodelphis hosei; stomach contents & nutritional value of prey; size selection); Robson 1966 (Pinnipedia; Phocidae; Otariidae; visual orientation & feeding); Roe 1969 (Physeter catodon; food & feeding; W. Iceland); Rorvik et al. 1976 (Balaenoptera physalus; W. Iceland; eat Meganyctiphanes norvegica); Ross 1979 (Kogia simus; Kogia breviceps; stomach contents; eat fish, crustacea & cephalopods); Russell 1975 (Ursus maritimus; food habits in summer & autumn in James Bay & S.E. Hudson Bay); Saiki & Mori 1956 (Balaenoptera physalus; stomach contents; eat Calanus cristatus); Scamman 1874 (Balaena mysticetus; N.E. N. America; account of whale fishery); Scheffer 1950 (Callorhinus orcinus); Scheffer & Neff 1948 (Zalophus californianus); Schultz & Rafn 1936 (Callorhinus ursinus; stomach contents; Washington); Seaman et al. 1982 (Delphinapterus leucas; W. Alaska; eat various fish); Sekarak et al. 1979 (Marine mammal); Sergeant 1969 (Delphinapterus leucas; feeding rates), 1973a (Pagophilus groenlandicus; feeding, growth & productivity in N.W. Atlantic), 1976 (Pagophilus groenlandicus;

Cystophora cristata; history & status of populations); Sergeant & Hoek (Delphinapterus leucas; Balaena mysticetus; seasonal distribution in E. Beaufort Sea); Shapunov 1971 (Tursiops truncatus ponticus; requirements & energy balance); Shimek 1977 (Enhydra lutris; underwater foraging habits); Shustov 1965 (Histriophoca fasciata; feeding habits), 1970 (Pusa hispida; daily dynamics in rookeries of Sea of Okhotsk); Sinclair 1981 (Inuit; relative importance of ω6 and ω3 fatty acids; studies with an Eskimo diet); Siversten & Bjorge 1980 (Halichoerus grypus; Helgeland, Norway); Sleptsov 1961a (Phocoena phocoena; Globicephala melaena; Tursiops truncatus; Orcinus orca; Ziphius sp.; Berardius sp.; Mesoplodon sp.; eat fish, crustaceans & molluscs in Bering Sea), 1961b (Cetacea; distribution & feeding areas in Sea of Okhotsk); Smith 1966a (Halichoerus grypus), 1971 (Phocoena phocoena; diet & stomach contents); Smith & Gaskin 1974 (Phocoena phocoena; E. Canada; Bay of Fundy), 1983 (Phocoena phocoena; environment index for habitat use by females with calves near Deer I., Bay of Fundy); Smith 1973a (Pusa hispida; population dynamics in Canadian E. Arctic), 1973b (Pusa hispida; management), 1980 (Ursus maritimus; Pusa hispida; Erignathus barbatus; ice inhabitaters are food of polar bear), 1977 (Phoca hispida; eat Anarhichas denticulatus; Amundsen Gulf area, N.W.T.); Soederberg 1971a (Pinnipedia; food habits; Baltic Sea), 1971b (Pinnipedia; commercial damage & feeding habits; Baltic Sea); Sokolov 1958 (Pinnipedia; Lake Ladoga); Sonnenfeld 1957 (Inuit; subsistence of Barrow Inuit); Spalding 1964 (Callorhinus ursinus; Eumetopias jubata; Phoca vitulina; comparative feeding habits in British Columbia coast); Spellenberg 1975 (Marine mammals; predation on penguins); Spotte & Adams 1979 (Callorhinus ursinus; intake), 1981 (Ursus maritimus; feeding rate of captive adult female); Squires 1969 (Marine mammals; decapods & crustacea; Beaufort Sea & Arctic waters of Cambridge Bay, 1960-65); Stephenson 1977 (Enhydra lutris; eat pismo clams; Monterey Bay, California); Steiner et al. 1979 (Orcinus orca; vocalization & feeding behaviour); Stirling & Archibald 1977 (Ursus maritimus; eat Pusa hispida & Erignathus barbatus); Stirling & McEwan 1975a (Ursus maritimus; caloric value of whole Pusa hispida in relation to ecology & hunting behavior); Stirling et al. 1975a (Ursus maritimus; Beaufort Sea); Stone & Siniff 1981 (Hydrurga leptonyx); Sund 1975 (Eschrichtius robustus; feeding during migration); Swartzman & Haar 1983 (Callorhinus ursinus; eat fish; population & fishery, Bering Sea); Tanaka 1982 (Marine mammals; sighting; survey); Tarasevitch 1968 (Physeter catodon; eat squid, octopus & 5 spp. of fish in N. Pacific); Taylor et al. 1955 (Callorhinus ursinus; distribution & food habits in N. Pacific); Taylor 1971 (Callorhinus ursinus; stomach contents; eat Pacific herring); Templeman 1968 (Pagophilus groenlandicus; eat capelin; N.W. Atlantic); Tranter 1977a (Cetacea; plankton ecosystems in E. Indian Ocean; ecology of Copepoda), 1977b (Cetacea; plankton ecosystem in E. Indian Ocean; ecology of Amphipoda); Tranter & Kerr 1977 (Cetacea; plankton ecology of E. Indian Ocean; numerical abundance & biomass); Van de Vere 1975 (Enhydra lutris; replenishment of food spp.); Van Dyke & Ridgway 1977 (Marine mammals; diets; handbook series on nutrition & food); van Wagenen et al. 1981 (Enhydra lutris; predation on birds); Vibe 1950 (Delphinapterus leucas; Monodon monoceros; Erignathus barbatus; Odobenus rosmarus; Thule district; N.W. Greenland); Vladykov 1946 (Delphinapterus leucas; St. Lawrence R.); Wada 1971 (Callorhinus ursinus; food & feeding habits; Sanriku, Japan), 1979 (Callorhinus ursinus; feeding habits; Sanriku); Wade 1975 (Enhydra lutris; eat pismo clams); Watkins 1975 (Cetacea; right whale feeding & baleen rattle); Watkins & Schevill 1979 (Eubalaena glacialis; Balaenoptera borealis; Megaptera novaeangliae; B. physalus; feeding behavior), 1982 (Eubalaena glacialis; feeding; Cape Cod, Massachusetts); Wellington & Anderson 1978 (Eschrichtius robustus; stomach contents; surface feeding by a juvenile); Whitehead 1983 (Megaptera novaeangliae; structure & stability of groups off Newfoundland); Whitehead & Moore 1982 (Megaptera novaeangliae; distribution & movement in winter); Wilke 1957 (Phoca vitulina; Enhydra lutris; Amchitka I.); Wilke & Kenyon 1952 (Callorhinus ursinus; Phoca vitulina; Zalophus californianus), 1954 (Callorhinus ursinus; E. Bering Sea), 1957 (Callorhinus ursinus; E. Bering Sea); Wilson & Pitcher 1979 (Orcinus orca; feeding & behaviour in Foyle estuary, Ireland); Winter & Carscadden 1978 (Pinnipedia; Cetacea; review of capelin ecology & estimation of surplus from predator dynamics); Xu et al. 1983 (Balaenoptera davidsoni; Balaenoptera acutorostrata; eat Ammodytes personatus & Euphausia pacifica; body length & embryo length); Yukhov 1971 (Physeter catodon; feeding in high Antarctica); Zenkovitch 1970 (Cetacea; plankton in Antarctica); Zimushko & Lenskaya 1970a (Eschrichtius gibbosus; feeding at foraging grounds), 1970b (Eschrichtius gibbosus; feeding at foraging grounds).

HAEMATOLOGY

Adams & Osburn 1973 (Mirounga angustirostris; electrophoresis of serum proteins of pup & female adult); Allendorf et al. 1979 (Ursus maritimus; electrophoresis of serum enzymes); Ananthakrishnan & McDermid 1971 (Mirounga leonina; 2 genetic variants of red cell acid phosphatase); Andersen 1966 (Phocoena phocoena; physiological range of formed elements in the blood), 1968 (Phocoena phocoena; physiological range of blood chemical parameters in captive); Austin 1976 (Pagophilus groenlandicus; Pusa hispida; tissue distribution & plasma levels of 4 clinical enzymes); Austin & Geraci 1981 (Pusa hispida; Pagophilus groenlandicus; plasma & tissue activities of enzymes; creatine kinase, aldolase, γ-glutamyl transferase & leucine amino peptidase; clinical application); Bailey et al. 1981 (Pagophilus groenlandicus; changes in fatty acid composition of plasma during the post-weaning fast); Baluda et al. 1972 (Cetacea; electrophoresis of hemoglobins); Bang & Dyerberg 1972 (Inuit; plasma, lipids & lipoproteins; W. Greenland); Bang et al. 1971 (Inuit; plasma, lipid & lipoprotein patterns; W. Greenland); Beck 1956 (Mirounga leonina; copper content of blood & liver); Blix et al. 1983 (Halichoerus grypus; Phoca vitulina largha; cardiac outputs & its distribution through capillaries & rioventricular shunts in diving); Blumberg et al. 1960 (Callorhinus ursinus; haptoglobins, hemoglobins & serum proteins); Bonner & Fogden 1971 (Phoca

vitulina; Halichoerus grypus; blood typing); Border 1975 (Tursiops truncatus; Globicephala scammoni; Lagenorhynchus obliquidens; Orcinus orca; electrophoresis of hemoglobins); Borisov 1966 (Pagophilus groenlandicus; serological analyses of colonies), 1969a (Cetacea; comparative analysis of serum albumins), 1969b (Ursus arctos; U. maritimus; Histriophoca fasciata; Pusa hispida; Cystophora cristata; Odobenus rosmarus; Physeter catodon; Balaenoptera musculus; B. physalus; comparative study of antigenic properties of serum proteins), 1969c (Cetacea; serological analysis of interrelations of mammals), 1981a (Physeter catodon; Balaenoptera physalus; B. borealis; B. acutorostrata; electrophoresis of hemoglobins & hemoglobins), 1981b (Balaenoptera acutorostrata; B. physalus; Physeter macrocephalus; electrophoresis of protein isozymes from blood plasma, corpus luteum, corpus albicans & testes); Boyd 1983 (Halichoerus grypus; luteal regression follicle growth & concentration of some plasma steroids during lactation; progesterone & estradiol-17-β; estrus); Bryden & Lim 1969 (Mirounga leonina; blood parameters; diving); Budantseva 1980 (Physeteridae; spermaceti oil on rat enzymes & bilirubin); Bunn et al. 1974 (Pinnipedia; 2,3-diphosphoglycerate in mediating hemoglobin function of erythrocyte membranes); Cargill et al. 1979 (Neophoca cinerea; blood plasma constituents of clinically normal; change with age & sex; compared to Zalophus californianus, Callorhinus ursinus, Phoca vitulina & Mirounga angustirostris); Cavagnolo 1979 (Callorhinus ursinus; Zalophus californianus; immunology); Cavagnolo & Vedros 1978 (Callorhinus ursinus; identification & characterization of 3 immunoglobin classes of serum & throat mucus), 1978a (Callorhinus ursinus; immunoglobin levels), 1979 (Callorhinus ursinus; serum & colostrum immunoglobins (IgG, IgM & IgA) levels in immature & adult); Chernoivanov & Bogdanov 1979 (Callorhinus ursinus; inherited polymorphism of blood serum peroxidases); Chuba et al. 1970 (Pinnipedia; Otariidae; B-like blood factor); Clausen & Ersland 1969 (Cystophora cristata; respiratory properties of blood); Cline et al. 1969 (Lobodon carcinophagus; Leptonychotes weddelli; Mirounga leonina; immobilizing & collecting blood; Antarctica); Cohen et al. 1983 (Orcinus orca; differential lymphocytotoxicity of sera for human leukemic & normal lymphocytes); Cornell 1983 (Orcinus orca; hematology & clinical chemistry; serum LDH, urea, creatinine, glucose & hemoglobin concentrations); Cornell et al. 1981 (Cetacea; clinical application & hematological values of captive); Costa & Ortiz 1982 (Mirounga angustirostris; blood chemistry hemostasis during prolonged fasting; serum electrolyte, alkaline phosphatase, lactate dehydrogenase, glucose, urea, creatinine, protein, albumin, globulin, triglycerides, cholesterol, uric acid & bilirubin); Cushing 1961 (Callorhinus ursinus; blood typing), 1963 (Cetacea; blood groups & systematics), 1964 (Marine mammals; blood groups); Cushing et al. 1963 (Marine mammals; JU blood-typing system & specific soluble substances); D'Angelo 1982 (Delphinapterus leucas; erythrocyte glucose-transport system; protein permeability); Dawe & Berard 1971 (Pinnipedia; comparative pathology of hematopoietic & lymphoreticular neoplasms); De Monte & Pilleri 1968a (Delphinus delphis; hemoglobins, albumin, prealbumin & several post-albumins; electrophoresis), 1968b (Delphinus delphis; electrophoretic mobility of hemoglobin & plasma protein fractions), 1972 (Inia geoffrensis; Platanista indi; P. gangetica; haematological plasmic & urinary values); Dhindsa et al. 1974 (Orcinus orca; Delphinapterus leucas; respiratory function of blood; hemoglobin electrophoresis); Dormer et al. 1977 (Zalophus californianus; cerebral blood flow during voluntary dive); Duffield et al. 1983 (Tursiops sp.; haematology distinguishes coastal & offshore forms); Dyerberg & Bang 1979 (Inuit; lipid metabolism, atherogenesis & haemostasis; role of prostaglandin-3 family), 1979a (Inuit; haematology; hemostatic function & platelet polyunsaturated fatty acids); Dyerberg et al. 1975 (Inuit; lipid; fatty acid composition of plasma; Greenland), 1977 (Inuit; lipid; plasma cholesterol concentration; W. Greenland), 1978 (Inuit; lipid; ecosapentaenoic acid & prevention of thrombosis & atherosclerosis); Dyerberg & Jorgensen 1982 (Inuit; marine mammal; lipid; review; marine oils & thrombogenesis); Eadie & Kirk 1952 (Mirounga leonina; Na & K concentration in blood cells & plasma); Eichelberger et al. 1940a (Cetacea; distribution of water & electrolytes in blood of dolphins); Engelhardt 1977c (Pagophilus groenlandicus; adaptive temperal changes in blood from newborn to adults), 1977d (Pinnipedia; Phoca sp.; changes in physical & chemical characteristics of blood as related to molt), 1979 (Cetacea; Pinnipedia; haematology & plasma chemistry of captive); Eubanks et al. 1976 (Ursus americanus; serum Ca, P & glucose); Ferguson & Folk 1971 (Ursus maritimus; plasma fatty acid levels); Fisher et al. 1974 (Marine mammals; erythrocyte inorganic pyrophosphatase); Florkin & Redfield 1931 (Pinnipedia; sea lion; respiratory function of blood); Franzmann et al. 1981 (Eumetopias jubata; Ursus americanus; U. arctos; 8-endomorphin levels in blood); Fujino 1954 (Berardius bairdi; blood types), 1962 (Physeter sp.; Balaenopterus physalus; blood types; Antarctic); Gallien et al. 1967 (Delphinus delphis; electrophoresis of serum proteins; prealbumin, albumin, transferrin & globulins; 21 fractions), 1970 (Delphinus delphis; Stenella styx; Grampus griseus; Globicephala melaena; immunoelectrophoresis of serum proteins; transferrin; 21 constituents); Gelentyuk et al. 1972 (Enhydra lutris; Pinnipedia; some properties of the blood); Geraci 1971 (Pagophilus groenlandicus; functional haematology); Geraci & Engelhardt 1974 (Pagophilus groenlandicus; effect of storage time, temperature & anticoagulants; on hemograms); Geraci et al. 1969a (Delphinapterus leucus; studies), 1969 (Delphinapterus leucas; Tursiops truncatus; serum constituents; serum Na, Cl, Ca, P , blood urea, uric acid, total protein, albumin, globulin, lactic acid, glutamic oxaloacetic transaminase & glutamic pyruvic transaminase); Geraci & Medway 1973 (Tursiops truncatus; stress on haematologic & plasma chemical parameters; simulation), 1974 (Tursiops truncatus; changes in haematology & chemistry during blood & plasma study; simulation); Geraci & Smith 1975 (Pusa hispida; functional haematology; Canadian Arctic; vertebral extradural vein blood sampling techniques); Geraci & St. Aubin 1979 (Tursiops truncatus; Delphinapterus leucas; Phocoena phocoena; tissues sources & diagnostic value of circulating enzymes; liver, plasma & muscle

alanine aminotransferase, aspartate aminotransferase; sorbitol dehydrogenase, γ-glutamyl transferase, alkaline phosphatase & creatine kinase); Geraci et al. 1979 (Pusa hispida; age, condition, sampling time & method in plasma chemical constituents in free-ranging; PO_4, Ca, K, Na, Cl, cholesterol, uric acid, alkaline phosphatase, triglycerides, BUN, glucose, bilirubin & aspartate aminotransferase); Gilman 1979 (Phoca vitulina; ethyl isocyanide bound to myoglobin & hemoglobin); Gilmartin et al. 1974 (Eschrichtius gibbosus; physiological parameters of blood); Glazova 1972 (Pagophilus groenlandicus; physiological-biochemical characteristics of blood of pups), 1977 (Pagophilus groenlandicus; physiological & biochemical blood indices; electrophoresis of hemoglobin & serum proteins; electrophoresis; 5-8 fractions); Goodman et al. 1975 (Phoca vitulina; Darwinian evolution in the genealogy of hemoglobins); Greenwood et al. 1971 (Halichoerus grypus; blood values in young); Griner et al. 1971 (Phoca vitulina geronimensis; malignant leukemic lymphoma); Guard & Murrish 1975 (Marine mammals; effect of temperature on viscous behaviour of blood; Antarctic); Gulliver 1845 (Marine mammals; size of red corpuscles of blood), 1847 (Otaria byronia (=Otaria jubata); Odobenus rosmarus; measurement of erythrocyte); Halloran & Pearson 1972 (Ursus arctos; blood chemistry; S.W. Yukon; creatinine, uric acid, urea, Ca, P, Na, K & Cl); Harkness & Grayson 1969 (Tursiops truncatus; erythrocyte metabolism glucose via hexose monophosphate shunt; 2,3-phosphoglyceric cycle; glucose-6-phosphate dehydrogenase); Hashimoto et al. 1967a (Orcinus orca; Physeter macrocephalus; Globicephala melaena; aliphatic wax alcohols & other lipids in atheromata & arterial tissues; plasma lipids & lipoproteins; wax esters & sterol esters); Heath 1978 (Halichoerus grypus; serum protein analysis); Hochachka et al. 1979 (Leptonychotes weddelli; unusual maternal-fetal blood glucose concentration in resting & fasting); Holmquist et al. 1976 (Phoca vitulina; Zalophus californianus; evolution of globulin family of genes; maximum parsimony genetic distances from α-hemoglobin & myoglobin phylogenies); Horvath et al. 1968 (Zalophus californianus; Cetacea, 4 porpoise spp.; respiratory & electrophoretic characteristics of hemoglobin); Hunter & Madin 1976 (Callorhinus ursinus; Mirounga angustirostis; clinical blood values; cholesterol, BUN, globulins, bilirubin & total protein), 1978 (Callorhinus ursinus; clinical blood values; fresh vs stored frozen serum; total protein, globulin, creatinine, P, cholesterol & bilirubin), 1978a (Callorhinus ursinus; compare eye fluid & blood serum); Imaizumi et al. 1982 (Physeteridae; role of heme side in oxygenation of myoglobin); Irving et al. 1935d (Pinnipedia); Junquerira et al. 1968 (Cetacea; dolphin; biochemistry of blood serum); Kaduce et al. 1981 (Ursus maritimus; characterization of plasma lipids & lipoproteins; fatty acid composition of plasma phospholipids; LDH); Kandinskii 1970 (Pinnipedia; blood groups), 1973 (Pinnipedia; blood erythrocytes; dimensional characteristics; Antarctic), 1974 (Hydrurga leptonyx; Lobodon carcinophagus; Ommatophoca rossi; Leptonychotes weddelli; viscosity, specific weight & hematocrit of blood); Kerry & Messer 1968 (Arctocephalus tasmanicus; Arctocephalus forsteri; Mirounga leonina; intestinal glycosidase; uridyl transferase, UDP-glucose pyrophosphatase, lactase, amylase, sucrase & trehalase); Konogaya 1963 (Stenella coeruleoalba; amino acid sequence of hemoglobins); Kooyman 1981b (Lobodon carcinophagus, general; handbook); Kooyman & Drabek 1968 (Leptonychotes weddelli; milk, blood & urine constituents); Kooyman et al. 1972 (Phoca vitulina; Leptonychotes weddelli; Mirounga angustirostris; blood nitrogen tension; simulated deep dives), 1978 (Leptonychotes weddelli; blood chemistry of free diving), 1980 (Leptonychotes weddelli; anaerobic & aerobic metabolism during voluntary dive; hemoglobin, lactose & glucose concentration); Korzhuev 1952 (Marine mammal; forms of localization & quantity of hemoglobin of different animals); Korzhuev et al. 1979 (Black Sea dolphin; characteristics of blood; review); Korzhuev & Glazova 1967a (Black Sea dolphin; quantitative characterization of blood & hematopoietic organs), 1967b (Pusa caspica; concentration of muscular hemoglobin), 1967c (Pusa caspica; muscle & heart myoglobin), 1971 (Cetacea; biochemical aspect of adaptations; hemoglobin synthesis); Kraft 1962 (Phoca vitulina; blood analysis); Kupke et al. 1979 (Marine mammals; differences in the lipid & lipoprotein concentrations of capillary & venous blood); Kuzin 1971 (Callorhinus ursinus; morphologic pattern of blood in the ontogeny), 1972 (Callorhinus ursinus; ecological-morphological & age pecularities of red blood in embryo); Kuzin & Maminov 1981 (Ursus arctos; morphology of blood & arterial system); Kuzin & Sokolov 1970 (Callorhinus ursinus; red blood cells in embryos & newborn pups); Lapennas & Reeves 1982 (Halichoerus grypus; respiratory properties of blood; anaerobic metabolism); Lane et al. 1972 (Mirounga leonina; haematological study); Lee et al. 1977 (Ursus maritimus; blood value of wild; physiological parameters; hemoglobin, BUN, total proteins, cholesterol, glucose, bilirubin, Na, K, Cl, Mg, Ca, P, glutamic pyruvic transaminase, glutamic oxaloacetic transaminase; alkaline phosphatase & lactate dehydrogenase); Lenfant 1969a (Marine mammals; physiological properties of blood); Lenfant et al. 1969 (Leptonychotes weddelli; respiratory function of blood & adult & unborn), 1970 (Leptonychotes weddelli; tolerance to sustained hypoxia); Lenfant & Johansen 1968 (Phoca vitulina; Histriophoca fasciata; Callorhinus ursinus; Eumetopias jubata; Odobenus rosmarus; morphological & chemical properties of blood); Leone & Wiens 1956 (Callorhinus ursinus; comparative serology); Lewis 1964 (Marine mammals; plasma proteins), 1973 (Marine mammals; variations in abilities of fibrogens to clump staphlococci), 1975 (Marine mammals; comparative haematology), 1976 (Marine mammals; cross-reactivities of mammalian fibrogens); Lewis et al. 1969 (Tursiops truncatus; coagulation factor 12 deficiency); Lewis & Wilson 1973 (Pinnipedia; variations in ability to clump staphlococci); Lincoln et al. 1973 (Phoca vitulina; Histriophoca fasciata; Halichoerus grypus; Odobenus rosmarus; Zalophus californianus; Callorhinus ursinus; Mirounga angustirostris; hemoglobins); MacNeill 1975 (Cetacea; blood values of some captives); Magomaev & Olenchenko 1971 (Pusa caspica; level of macro- & microelements in meat, viscera & blood); Malvin & Rayner 1968 (Cetacea; renal function & blood chemistry); Margni et al. 1971 (Leptonychotes weddelli; seroprotein, glycoproteins, lipoproteins & immunoglobulins), 1972 (Leptonychotes weddelli; serum proteins, glycoproteins & lipoproteins); Martinez 1980

(Otaria byronia; Arctocephalus australis; haematological & serological studies); Matsui et al. 1975a (Stenella coeruleoalba; purification & properties of diaphorase); McDermid et al. 1972 (Mirounga leonina; electrophoresis of plasma & red cell proteins & enzymes; hemoglobin, ceruloplasmin, albumin, prealbumin, haptoglobin, transferrin, phosphoglucomutase, phosphohexose isomerase, 6-phosphogluconate dehydrogenase, lactate dehydrogenase; adenylate kinase; peptidases, diaphorase, esterases & alkaline phosphatase); McDermid & Bonner 1975 (Halichoerus grypus; Phoca vitulina; red cell & serum protein systems; electrophoresis of peptidase C, phosphoglucomutase, nucleoside phosphorylase, adenylate kinase & hemoglobin; hemopexins system); Medway 1974 (Eschrichtius robustus; coagulation factors in plasma); Medway & Geraci 1964 (Tursiops truncatus; haematology), 1965 (Tursiops truncatus; blood chemistry; whole blood, serum & plasma Na, Cl, albumin, α_1-, α_2-& β-globulins & BUN), 1972a (Tursiops truncatus; leukocyte distribution between capillaries & large vessels), 1978 (Pagophilus groenlandicus; Phoca vitulina; Halichoerus grypus; Mirounga angustirostris; Zalophus californianus; Pusa hispida; pathology); Medway et al. 1970a (Tursiops truncatus; hematologic response to corticosteroids (Dexamethesone) administration; plasma cortisol content & eosinophil count; lymphopenia; neutrophilia); Medway & Moldovan 1966 (Globicephala melaena; blood studies); Mills & Taylaur 1971 (Marine mammals; lipid; protein; distribution & composition of serum lipoprotein of 18 spp.); Moller et al. 1966 (Cystophora cristata; Pagophilus groenlandicus; Erignathus barbatus; Pusa hispida; blood analyses & populations); Morii 1981 (Stenella coeruloealba; blood plasma and erythrocyte fatty acids & proteins; free short-chain fatty acids); Motavkina et al. 1957 (Cetacea; isolation of blood complement); Murdaugh et al. 1967 (Phoca vitulina; cation transport in erythrocyte), 1968 (Pinnipedia; APT-2,3-diphosphoglyceric acid ratios in erythrocytes); Murphy & Hochachka 1981a (Leptonychotes weddelli; free amino acid profiles in blood during diving & recovery); Murphy et al. 1982 (Leptonychotes weddelli; free amino acids in blood of unborn & mothers); Myhre et al. 1969 (Tursiops truncatus; blood groups), 1971 (Tursiops truncatus; blood groups); Naevdal 1965 (Pagophilus groenlandicus; protein polymorphism for identification), 1966 (Pagophilus groenlandicus; Cystophora cristata; Pusa hispida; Erignathus barbatus; hemoglobin & serum proteins; electrophoresis; N. Atlantic), 1969 (Pagophilus groenlandicus; protein polymorphism; E. Canada), 1971 (Marine mammals; serological studies); Needham et al. 1980 (Neophoca cinerea; haematology; erythrocyte, leukocyte neutrophil, lymphocyte & eosinophil counts); Nelson 1970 (Mirounga angustirostris; Pagophilus groenlandicus; lipid composition of blood; plasma & erythrocyte neutral lipid & phospholipid composition), 1971 (Tursiops truncatus; Halichoerus grypus; Pusa hispida; lipid composition of blood, plasma & erythrocyte; phospholipids (PC, PE, SPH, PS) & glucosphingolipids), 1972b (Marine mammals; lipid composition & metabolism of erythrocytes), 1972a (Marine mammals; quantitative analysis of blood lipids), 1973 (Tursiops truncatus; fatty acid composition of plasma & erythrocytes; contain iso- & multiple-branched fatty acids); Palumbo et al. 1971 (Pinnipedia; sea lion; special topic; blood collection); Parks et al. 1973 (Pinnipedia; purine metabolism of primitive erythrocytes; electrophoresis of AMP kinase, GMP kinase, nucleoside diphosphokinase, purine nucleoside orthophosphate ribosyl transferase & hypoxanthine guanine phosphoribosyl transferase); Pauly & Wolfe 1957 (Eumetopias jubata; Zalophus californianus; Odobenus rosmarus; Phoca vitulina; serological relationships); Prothero 1980 (Cetacea; Pinnipedia; scaling of blood parameters); Puett et al. 1973 (Pinnipedia; conformational stabilities of homologous hemoproteins; myoglobins); Pugh 1959 (Leptonychotes weddelli; carbon monoxide content of blood); Puppione 1969 (Phoca vitulina; Leptonychotes weddelli; Zalophus californianus; Callorhinus ursinus; Eumeptopias jubata; Odobenus rosmarus; physical & chemical characterization of serum lipoproteins), 1978 (Phoca vitulina; Mirounga angustirostris; serum lipoproteins during alimentary lipemia; electrophoresis; LDL, VLDL, HDL & chylomicrons); Puppione & Coggiola 1966 (Eumetopias jubata; Mirounga angustirostris; Phoca vitulina; serum lipoprotein distribution); Puppione et al. 1971 (Orcinus orca; serum lipoproteins; electrophoresis patterns, distribution of classes (VLDL; LDL; HDL) & their lipid composition), 1970 (Pinnipedia; partial characterization of serum lipoproteins); Puppione & Nichols 1970 (Zalophus californianus; Phoca vitulina; Odobenus rosmarus; Tursiops truncatus; characterization of chemical & physical properties of serum lipoproteins); Qvist et al. 1981 (Leptonychotes weddelli; oxygen equilibrium properties of blood & hemoglobin of unborn & adult); Rakestraw & Swain 1923 (Eumetopias jubata; uric acid content of blood); Rhodes 1975 (Marine mammals; biochemical profile of exotic captives); Ridgway 1965 (Pinnipedia; medical care), 1972 (Pinnipedia; homeostasis); Ridgway et al. 1969 (Lagenorhynchus obliquidens; Phocoenoides dalli; Tursiops truncatus; Tursiops gilli; chemical & physical characteristics of blood; serum glutamic oxaloacetic transaminase, BUN, Na, Cl, K, cholesterol & haematological parameters), 1970 (Cetacea; haematologic findings of porpoise & whales); Ridgway & Howard 1979 (Cetacea; lung collapse & intramuscular circulation during free dive; evidence from nitrogen washout); Ridgway & Johnson 1966 (Cetacea; blood O_2 & ecology); Robin et al. 1971 (Phoca vitulina; cation transport & energy metabolism in high Na & low K erythrocyte), 1970 (Phoca vitulina; Leptonychotes weddelli; biochemical adaptations subserving prolonged diving), 1968 (Phoca vitulina; energy metabolism in erythrocyte); Robinson et al. 1969 (Marine mammals; Hagemann factor (factor 12) deficiency); Ronald 1967 (Pagophilus groenlandicus; physical blood properties from 1-12 month old), 1970 (Pagophilus groenlandicus; physical blood properties of neonatal & mature); Ronald et al. 1969 (Pagophilus groenlandicus; physical blood properties; albumin electrophoresis; 11 bands); Ronald & Kay 1982 (Pusa sibirica; haematology & plasma chemistry of captives); Saito et al. 1974 (Delphinapterus leucas; Orcinus orca; Tursiops truncatus; Fletcher factor activity in plasmas), 1976 (Orcinus orca; Delphinapterus leucas; Fitzgerald factor high molecular weight kininogen clotting activity in health & disease); Sarich 1969a (Zalophus californianus; Phoca vitulina; pinniped origin & rate of evolution), 1972 (Odobenus rosmarus; Phoca vitulina; Callorhinus ursinus; nonidentity of several

carnivore hemoglobins); Seal 1969 (Marine mammals; hemoglobin study; systematics); Seal et al. 1971a (Lobodon carcinophagus; Leptonychotes weddelli; Mirounga leonina; blood chemistry & blood polymorphism), 1971b (Lobodon carcinophagus; biochemical, population genetic, phylogenic & cytological studies; electrophoresis of plasma proteins & enzymes); Seidel 1980 (Ursus maritimus; clinical contribution to haematology); Serat et al. 1977 (Pinnipedia; DDT & DDE in blood diet of Inuit); Sharp 1975 (Cetacea; Delphinidae; electrophoresis & oxygen-dissociation properties of hemoglobins); Shaughnessy 1969 (Leptonychotes weddelli; transferrin polymorphism & population structure), 1970 (Pinnipedia; Otariidae; Arctocephalus spp.; variations in serum proteins), 1974a (Mirounga leonina; electrophoresis of blood & milk proteins), 1975b (Phoca vitulina richardi; Phoca vitulina largha; electrophoretic & comparison of albumin, hemoglobin & lactate dehydrogenase); Shimizu & Matsuura 1962 (Stenella coeruleoalba; physical & chemical properties of crystalline carbonic anhydrase from erythrocytes), 1971 (Stenella coeruleoalba; metamyoglobin reductase in muscle & erythrocytes); Simpson et al. 1970 (Mirounga angustirostris; blood volume & haematologic values of the young); Sjöstrand 1962 (Marine mammals; blood volume; handbook); Sleet et al. 1981 (Physeter catodon; estimate of total blood volume & total body weight); Smith et al. 1979a (Zalophus californianus; Mirounga sp.; erythrocyte deformability; variability), 1976 (Zalophus californianus; Callorhinus ursinus; 4 serotypes of San Miguel sea lion serum virus; neutralizing bodies); Sokolov 1966 (Eumetopias jubata; Odobenus rosmarus; Erignathus barbatus; Histriophoca fasciata; Phoca vitulina; Pusa hispida; ecolo-functional & age pecularities of red blood), 1969 (Pinnipedia; Otariidae; Phocidae; quantity of myoglobin & blood), 1967 (Eumetopias jubata; Odobenus rosmarus; Cystophora cristata; Phoca vitulina; Pusa hispida; Histriophoca fasciata; blood properties; N. Pacific); St. Aubin et al. 1978 (Pusa hispida; blood volume determination); Stone et al. 1973 (Zalophus californianus; renal blood flow in a diving trained); Suderman & Yeh-ku 1971 (Pagophilus groenlandicus; physico-chemical properties of hemoglobins); Suderman et al. 1973 (Pagophilus groenlandicus; hemoglobin zone electrophoresis & isoelectric focusing), 1978 (Pagophilus groenlandicus; Pusa hispida; P. sibirica; Phoca vitulina; heterogeneity & partial sequences of hemoglobins); Tawara 1950 (Pinnipedia; respiratory pigments in blood); Taylor & Farrell 1973 (Orcinus orca; light & election microscopy of peripheral blood neutrophils affected by Chediak-Higashi syndrome); Theil & Theil 1971 (Phoca vitulina; hemoglobin & myoglobin), 1972 (Phoca vitulina; molecular characteristics of hemoglobins & myoglobins); Travis et al. 1971 (Physeter catodon; Balaenoptera physalus; B. borealis; Megaptera novaeangliae; electrophoresis of hemoglobin (6 bands) & haptoglobin); Travis & Sanders 1972 (Megaptera novaeangliae; Balaenoptera physalus; B. borealis; plasma immunoglobulins; heavy side chain structure); Tyler 1960 (Lobodon carcinophagus; erythrocytes & hemoglobin); Vallayathan et al. 1969 (Pagophilus groenlandicus; levels of hemoglobin, iron, certain metabolites & enzymes in blood; hemoglobin, glucose, cholesterol & lipid content; amaylase, lactate dehydrogenase, aldolase, lipase & esterase activities); Van de Ven et al. 1979 (Halichoerus grypus; Hg, Se & CH_3Hg in liver, kidney, brain, blood & thyroid of wild & captive); Versaggi 1975 (Erignathus barbatus; Mirounga angustirostris; Phoca vitulina; Eumetopias jubata; Zalophus californianus; Odobenus rosmarus; intraosseous architecture; relation to acid-base homeostasis); Viglierchio & Gortz 1972 (Physeter catodon; hemoglobin derivatives of zooparasitic nematode, Anisakis physeteris & host); Vogl & Fisher 1982 (Monodon monoceros; Delphinapterus leucas; arterial retia related to supply of central nervous system); Wasserman & McKenzie 1956 (Phoca vitulina; plasma volume, cardiac output & recirculation time studies during the dive reflex); Weber 1981 (Leptonychotes weddelli; hemoglobins from unborn & mothers); Wells 1978 (Arctocephalus forsteri; haematology & oxygen transport; erythrocyte 2,3-diphosphoglycerate); Wells & Brennan 1979 (Leptonychotes weddelli; oxygen equilibrium properties of isolated hemoglobins; electrophoresis); Wilber 1948 (Marine mammals; blood & tissue lipids in relation to post-hibernation fat depletion); Williams & Pulley 1983 (Enhydra lutris; haematology & blood chemistry); Wolk & Kosygin 1979 (Odobenus rosmarus; physical parameters of blood); Worthy & Lavigne 1981a (Pagophilus groenlandicus; post weaning growth), 1981b (Pagophilus groenlandicus; changes in blood properties after weaning of fasting & feeding pups), 1982 (Pagophilus groenlandicus; change in blood properties of fasting & feeding pups after weaning; alkaline phosphatase, glutamyl pyruvate transaminase, creatine phosphokinase & Cu); Yanyanos 1968 (Phoca vitulina; temperature dependence of viscosity of heparinized blood); Zasypkin 1982 (Pinnipedia; Phocidae; glyoxalase I polymorphism); Zettner 1974 (Eschrichtius gibbosus; hematologic observations).

LIPIDS

Abe & Tamai 1981 (Ursus arctos yesoensis; Aluropoda melanoleuca; lipid composition of brain; linear & α-hydroxy fatty acids by capillary GLC; cholesterol, cerebroside, sulfatides & gangliosides in brain); Abe & Soda (Balaenoptera musculus; B. physalus; isolation of lipids; body wax & sterol); Ackman 1966 (Halichoerus grypus; Phoca vitulina; empirical relationship between iodine No. & polyunsaturated fatty acid content); Ackman & Burgher 1963 (Halichoerus grypus; component fatty acids of milk); Ackman & Castell 1966 (Marine mammal; herring, isomeric monoenoic fatty acid oil); Ackman et al. 1963 (Pagophilus groenlandicus; systematic identification of oil fatty acids by GLC); Ackman & Eaton 1966 (Balaenoptera physalus; occurrence of eicosenoic & docosenoic fatty acids in Meganctyphanes norvegica & effect in whale oil composition), 1966a (Marine mammals; food; herring; fatty acid composition), 1967 (Marine mammals; food; Meganyctiphanes & Pandalus borealis; fatty acid composition), 1971 (Marine mammals; food; Ammodytes americanus, lipids & fatty acid composition of oils; Nova Scotia), 1977 (Pinnipedia; docosenoic acids in a heart; pathological effect); Ackman et al. 1967a (Marine mammals; food; herring, turbot, sable fish, fatty acid composition of oils; iodine No.), 1968 (Balaenoptera physalus; lipids in milk, N. Atlantic;

lipid content, fatty acid composition of triglycerides & phospholipids), 1965a (Balaenoptera physalus; fatty acid composition of whale blubber & its sections; N. Atlantic), 1965b (Balaenoptera physalus; fatty acid composition of liver lipids & occurrence of 5,8,11,14-nonadecatetraenoic acids (19:4ω5) in liver), 1975a (Sotalia fluviatilis; comparison of bioacoustic lipids & habitat; isovalery wax esters & diisovaleryl triglycerides of melon, jaw & blubber), 1971a (Inia geoffrensis; composition of wax esters, triglycerides & diacylglycerylethers in jaw & blubber fats), 1971b (Tursiops truncatus; fatty acid composition of milk triglycerides), 1977 (Halichoerus grypus; dam-pup transfer of fatty acids), 1979 (Pagophilus groenlandicus; Halichoerus grypus; absence of myocardial lesions to long-term exposure to docosenoic acids on heart, muscle, blubber of dam-pup), 1970 (Marine mammals; Cetacea; fatty acid composition of krill (food) Meganyctiphanes norvegica & Thysanoessa inermis & role in food web; N. Atlantic), 1971c (Balaenoptera physalus; Pagophilus groenlandicus; fatty acid composition of blubber fats; N.W. Atlantic), 1975c (Balaenoptera physalus; B. borealis; blubber fat deposition in Mystoceti; fat content; dorsal, ventral & lateral blubber thickness; iodine No.), 1975b (Balaenoptera borealis; layering & tissue composition of blubber; N.W. Atlantic); Ackman & Hansen 1967 (Marine mammals; occurrence of phytanic & pristanic acid diastereomers); Ackman & Hooper 1968 (Pagophilus groenlandicus; Halichoerus grypus; Balaenoptera physalus; isoprenoid fatty acids in seal blubber & whale milk; 4,8,12-trimethyltridecanic acid, phytanic acid & pristanic acid; L,D,D- & D,D,D-diastereomers), 1974 (Phoca vitulina; Halichoerus grypus; long-chain monoethylenic & other fatty acids in heart, liver & blubber lipids); Ackman et al. 1969 (Marine mammals; food; capelin, fatty acid composition), 1974 (Pagophilus groenlandicus; Phoca vitulina; Cetacea; can a food chain be detected with fatty acids of depot & other organ fats?), 1972b (Phoca vitulina; fatty acids of lung & heart phospholipids & triglycerides); Ackman & Jangaard 1963 (Marine mammals; identification of major polyunsaturated C_{16} acids in oils by GLC separation factors), 1965 (Halichoerus grypus; fatty acid composition of blubber of lactating female); Ackman & Sipos 1965 (Pagophilus groenlandicus; Balaenoptera physalus; isolation of normal, odd-numbered & branched chain saturated fatty acids); Ackman et al. 1973 (Tursiops truncatus; molecular species of wax esters in jaw fat), 1967 (Pinnipedia; linear, iso, anteiso & multiple-branched fatty acids of marine origin; pristanic & phytanic acids); Addison 1982 (Marine mammals; organochlorine compounds & marine lipids); Akiya et al. 1950 (Physeter sp.; nutritive value ethyl esters of fatty acids of spermaceti oil); Akulin & Pervuninskaya 1972 (Pinnipedia; composition of fatty acids of Antarctic seals); Alimova & Moiseenko 1963 (Cetacea; isolation of high molecular weight isomeric fatty acids from fat with urea); Ando et al. 1979 (Ursus arctos yesoensis; general composition & chemical properties of main components of milk); André 1947 (Delphinus delphis; oil); André & Canal 1926 (Mesoplodon bidens; lipid); André & Francois 1926 (Physeter catodon; head & muscle oil; glycerol & fatty acid content); André & Maille 1947 (Delphinus delphis; Physeter macrocephalus; head oil; spermaceti; saponification No.); Anonymous 1966 (Cetacea; oil production); Avigan 1966 (Marine mammals; pathway of degradation of phytanic acid by α-decarboxylation); Bag et al. 1938 (Pinnipedia; Phocidae; low-grade blubber; convert to high-grade fatty acids); Bailey et al. 1980 (Pagophilus groenlandicus; neonatal changes on tissue levels of lipid & carbohydrate; triglyceride content of pup blubber during nursing & fasting), 1981 (Pagophilus groenlandicus; changes in fatty acid composition of plasma during post-weaning fast); Bailey 1952 (Phoca vitulina; Callorhinus ursinus; Eumetopias jubata; oils; Canada); Baker et al. 1963 (Ursus maritimus; gross composition & fat constitution); Baker & Nevenzel 1971 (Marine mammals; wax ester lipases); Bang & Dyerberg 1972 (Inuit; plasma lipids & lipoproteins; W. coast Greenland); Bang et al. 1971 (Inuit; plasma lipid & lipoprotein patterns; W. coast Greenland), 1980 (Inuit; Pinnipedia; food (seal) contains fat, individual fatty acids & cholesterol); Baptist 1941 (Ziphius cavirostris; analysis of head & body oil; specific gravity; refractive index; saponification No.); Bauer & Neth 1942 (Pinnipedia; seal oil); Beare-Rogers 1969 (Halichoerus grypus; Balaenoptera physalus; reaction of lipoxidase with polyenoic acids in oils), 1977 (Marine mammals; docosenoic acids in dietary fats); Beare-Rogers et al. 1972 (Pinnipedia; oils containing C_{22} fatty acids); Behrisch & Elsner 1980b (Phoca vitulina; molecular adaptation to diving habit; possible role of glycerol in ischemic kidney; glycerol from triglycerides); Belopolskii 1935a (Ursus maritimus; Okhotsk brown bear; oils); Bernhard et al. 1969 (Marine mammals; lipids in lenses); Birkby et al. 1982 (Globicephala melaena; polar lipids in keratinized tissues); Bjornhag et al. 1979 (Cetacea; Pinnipedia; post-natal growth correlation with milk composition; protein; fat; lactose); Blix et al. 1983 (Halichoerus grypus; Phoca vitulina largha; cardiac output & distribution through capillary & at rioventricular shunts in diving); Blomberg 1972 (Globicephala melaena; biological sonar; head oil; lipid analysis & ultrasonic studies), 1974 (Globicephala melaena; unusual head lipids; hydrocarbons (pristane), wax esters, cholesterol esters & triglycerides with none, one & two isovaleryl substituents); Blomberg & Lindholm 1976 (Globicephala melaena; variation in lipid composition & sound velocity in melon); Blomberg 1978 (Odontoceti; Globicephala melaena; functional aspects of head oil lipids); Blumer et al. 1963 (Cetacea; pristane in Calanus glacialis, C. hyperboreus & C. finmarchicus); Blumer & Thomas 1965 (Marine mammals, "Zamene" isomeric C_{19} monoolefins from zooplanktons, fishes & mammals); Blumer et al. 1964 (Marine mammals; pristane); Blumer & Thomas 1965a (Marine mammals; phytadienes in zooplankton); Bottino 1971 (Cetacea; composition of marine oil triglycerides determined by TLC), 1978 (Balaenoptera borealis; positional distribution of fatty acids in blubber, liver, muscle & stomach content (Parathemisto gaudichaudii) triglycerides & phospholipids); Brachi 1953 (Physeter catodon; components of liver oil; vitamins); Brockerhoff 1966 (Phoca vitulina; Pagophilus groenlandicus; Globicephala melaena; fatty acid distribution patterns in depot fats); Brockerhoff & Ackman 1967 (Pagophilus groenlandicus; Balaenoptera physalus; positional distribution of isomers of monoenoic fatty acids in glycerolipids of seal depot fats & whale milk fat);

Brockerhoff & Hoyle 1963 (Phoca vitulina; Pagophilus groenlandicus; Globicephala melaena; structure of depot fats; positional distribution of fatty acids in depot triglycerides); Brockerhoff et al. 1966a (Ursus maritimus; Phoca vitulina; positional distribution of fatty acids in fats), 1968 (Pagophilus groenlandicus; Phoca vitulina; Balaenoptera borealis; positional distribution of fatty acids in depot triglycerides), 1966b (Pinnipedia; positional distribution of fatty acids in triglycerides of depot fats); Brocklesby 1941 (Phoca vitulina; Pagophilus groenlandicus; Eumetopias jubata; chemistry & technology of oil; Canada); Brocklesby & Denstedt 1933 (Pinnipedia; industrial chemistry of oil; British Columbia); Brown & Rawlins 1926 (Cetacea; feeding whale oil on depot fat of rat); Bryden 1964 (Mirounga leonina; insulating capacity of subcutaneous fat), 1968c (Mirounga leonina; growth & function of subcutaneous fat); Bryden & Stokes 1969 (Mirounga leonina; metabolism of fatty acids in nursing cow, fasting cow, intact transfer of lipid from cow's depot via milk to pup's depot); Budantseva 1973 (Physeter catodon; whale oil in preparation in recognization of chronic gastric ulcers of rats), 1980 (Physeter catodon; effect of spermaceti oil on alanine amino transferase, alkaline phosphatase activities & bilirubin content); Burke & Jasperson 1944 (Halichoerus grypus; component acids of oil); Burkhardt et al. 1934 (Cetacea; pigment in oil); Cama & Meara 1953 (Balaenoptera physalus; fat content & component acids of milk & blubber); Cardin & Meara 1953 (Halichoerus grypus; lipids); Carola 1957 (Cetacea; Pinnipedia; chemical & physical properties of oil); Challinor et al. 1969 (Physeter catodon; head oil; hydrocarbons, wax esters & triglycerides; chain lengths from C_{25} to C_{37}); Clarke 1978a (Physeter macrocephalus; structure & proportions of spermaceti organ), 1978b (Physeter macrocephalus; physical properties of oil); Clegg 1951 (Callorhinus ursinus; oil characteristics of cold rendered blubber); Clements 1971 (Marine mammals; comparative lipid chemistry of lungs); Clough et al. 1947 (Cetacea; vitamin A & sterols in liver oils); Cmelik 1950 (Cetacea; oil from lower jaw, head, back & abdomen fat); Conacher et al. 1972 (Pinnipedia; isomers of monoethylenic fatty acids in partially hydrogenated oils); Cooke & Carter 1947 (Pinnipedia; oil); Costa & Ortiz 1982 (Mirounga angustirostris; blood chemistry hemostasis during fasting; cholesterol; triglycerides); Creach 1955 (Cetacea; physiological properties of saponifiable fraction); Dangerfield et al. 1976 (Pinnipedia; Ursus sp.; lipoproteins; atherosclerosis; electrophoresis); Dean 1947b (Pinnipedia; physical & chemical properties of oil); De Baar et al. 1983 (Marine mammals; vertical flux of fatty acids in N. Atlantic); Dedyukhina et al. 1979 (Cetacea; intramuscular lipids in meat; fatty acid composition of phospholipids; nutritional value of meat); De Iongh et al. 1965 (Cetacea; oil on serum lipids of man); Delcourt 1969 (Marine mammals; electrophoresis of lipoproteins); Denisov 1936 (Delphinapterus leucas; chemical composition of fat); Denton 1963 (Cetacea; Balaenoptera musculus; review of lipids; buoyancy mechanisms of sea creatures); Domart et al. 1955 (Marine mammals; fractionation of oil fatty acids with urea); Dugal & Riou 1947a (Pinnipedia; nutritive value of liver oil); Duinker & Hillebrand 1979a (Pinnipedia; transplacental transfer of organochlorines from female lipid tissue to the unborn); Dyerberg & Bang 1979 (Inuit; lipid metabolism; atherogenesis & haemostasis of Inuit; role of prostaglandin ω3 family), 1979a (Inuit; lipid; haematology; hemostatic function & platelet polyunsaturated fatty acids); Dyerberg et al. 1975 (Inuit; fatty acid composition of plasma lipid; Greenland), 1977 (Inuit; plasma cholesterol concentration; W. Greenland), 1978 (Inuit; eicosapentaenoic acid & prevention of thrombosis & atherosclerosis); Dyerberg & Jorgensen 1982 (Inuit; marine mammals; haematology; review; marine oils & thrombogenesis); Eaton et al. 1977 (Pagophilus groenlandicus; Halichoerus grypus; docosenoic acid; heart pathology); Engelhardt & Walker 1973 (Pagophilus groenlandicus; fatty acid composition of blubber, liver, muscle, heart, aorta, brain & testes); Eremeev 1930 (Marine mammals; fat production); Ferguson & Folk 1971 (Ursus maritimus; plasma fatty acid levels); Fried et al. 1967 (Leptonychotes weddelli; α-glycerophosphate dehydrogenase & glucose-6-phosphate dehydrogenase in tissues); Fujii et al. 1954a (Physeter sp.; blubber oil; molecular distillation), 1954b (Cetacea; nutritive value of hydrogenated oil), 1956 (Cetacea; nutritive value of glycerides & methyl esters); Fujii & Okura 1956a (Physeter sp.; sperm oil causes seborrhea), 1956b (Physeter sp.; nutritive value of hydrogenated oil with added essential fatty acids), 1957 (Physeter sp.; purification of wax by lipase); Fujii et al.1957 (Physeter sp.; separation of wax & glycerides); George & Ronald 1975 (Pagophilus groenlandicus; metabolic adaptation in skeletal muscle; carbohydrate metabolism; intracellular lipid droplets); Geraci et al. 1979 (Pusa hispida; age, condition, sampling time & method on plasma chemical constituents; cholesterol, triglycerides, BUN, uric acid, aspartate aminotransferase, bilirubin, glucose, alkaline phosphatase, Ca, Na, Cl & PO_4); Gershbein & Singh 1964 (Ursus maritimus; liver lipids); Gill & Tucker 1930 (Cetacea; porpoise; composition of jaw oil); Glass et al. 1967 (Leptonychotes weddelli; fatty acid constituents of milk fat); Glass & Jenness 1971 (Mirounga angustirostris; Pagophilus groenlandicus; constituent fatty acids of milk fat); Golovin 1962 (Cetacea; refractometer for fat determination); Gouw & Vlugter 1967 (Marine mammals; biological sonar; physical properties of triglycerides, ultrasonic sound properties); Gray 1928 (Cetacea; blubber); Gregory et al. 1955 (Balaenoptera sibbaldi; B. musculus; composition of milk; lipid content, several vitamins & minerals; proteins); Grynberg & Szczepanska 1965 (Physeteridae; fatty acid & fatty alcohol composition of head oil); Gupta 1967 (Cetacea; coprostanol in whale oil); Hallgren & Larsson 1963 (Marine mammals; herring; pristane); Halloran & Pearson 1972 (Ursus arctos; blood chemistry; lipid metabolism); Hammarsten 1909 (Odobenus rosmarus; analysis of bile); Hamilton et al. 1972 (Physeter catodon; alkanes & alcohols in oil); Hansen 1968 (Marine mammals; 4,8,12-trimethyltridecanoic acid); Hansen & Cheah 1969 (Physeter macrocephalus; dietary & tissue lipids; triglycerides, wax esters & fatty alcohols in head, blubber & stomach content (squid) oil); Hansen & Meiklen 1970 (Marine mammals; food Euphausia superba; lipids contain phytanic acid, pristanic acid & 4,8,12-trimethyltridecanoic acid; phytol moieties derived from diatoms); Harris et al. 1983 (Pin-

nipedia; Inuit; diet (seal) is high in 20:5ω3 & 22:6ω3; reduces plasma lipids & lipoproteins in Inuit); Hashimoto et al. 1966 (Balaenoptera physalus; separation of monoenoic, dienoic & trienoic fatty alcohols), 1967 (Physeter sp.; TLC of true wax); Hashimoto & Mukai 1963 (Physeter sp.; separation of alcohols of hydrocarbons in head oil), 1969 (Physeter sp., GLC of straight-chain wax exters); Hashimoto & Dayton 1964 (Orcinus orca; lipids of coronary & aortic atheromata); Hashimoto et al. 1967 (Orcinus orca; Physeter macrocephalus; Globicephala melaena; aliphatic wax alcohols & other lipids in atheromata & arterial tissues); Hashimoto & Mamuro 1967 (Balaenoptera borealis; pristane & squalene in unsaponifiable matter of blubber oil); Haslewood 1961 (Hydrurga leptonyx; Zalophus californianus; bile salts; α-phocaecholic acid, allocholic acid & hydrocholanic acid); Hatano et al. 1967a (Physeter sp.; wax & glyceride fractionation from spinal cord lipids), 1967b (Physeter sp.; fatty acid composition of spinal cord wax & glycerides); Herwig et al. 1983 (Balaena mysticetus; Eschrichtius robustus; stomach microbial formation of volatile fatty acids); Higashi et al. 1950 (Balaenoptera physalus; nutritive value of normal & hardened or polymerized oil), 1960 (Balaenoptera physalus; Pinnipedia; fatty acid & vitamin composition of liver from whale & pregnant & nonpregnant fur seals); Hilditch 1956 (Marine mammals; chemical constituents of fats); Hilditch & Lovern 1929 (Physeter sp.; head & blubber oil; fatty alcohol content); Hilditch & Maddison 1948 (Cetacea; component fatty acids & glycerides in oil); Hilditch & Pathak 1947 (Halichoerus grypus; component fatty acids & glycerides; low-temperature crystallization method), 1949 (Halichoerus grypus; Phoca vitulina; component acids of blubber & liver glycerides & phospholipids); Hopkins & Chisholm 1954 (Delphinapterus leucas; eicosenoic acid in glyceride oil); Howell 1930 (Monodon monoceros; myology; subdermal oil reserves); Hunter & Madin 1976 (Callorhinus ursinus; Mirounga angustirostris; clinical blood value; serum cholesterol, BUN, globulins, total protein & bilirubin), 1978 (Callorhinus ursinus; clinical blood values; fresh vs stored frozen serum; cholesterol, bilirubin, P, total protein, globulin & creatinine); Hustad et al. 1971 (Marine mammals; biological sonar; acoustic properties of some lipids); Hvolby 1974 (Pinnipedia; expansion of solidifying saturated fats); Igarashi & Hakubata 1952 (Pusa hispida; bile salts; α-phocaecholic acid); Igarashi & Zama 1955 (Physeter catodon; brain lecithins & their fatty acids); Igarashi et al. 1953 (Ziphius cavirostris; head blubber oil; acid No., iodine No., total fatty acids & unsaponifiable matter), 1956a (Balaenoptera borealis; lecithin, cephalin, phosphatidyl serine, neutral fat & unsaponifiable matter of heart; cholesterol), 1956b (Balaenoptera borealis; phosphatidic acid of heart & iodine No.); Iguchi 1953 (Physeter sp.; industrial use of sperm oil in Japan); Irving et al. 1957 (Marine mammals; melting point of animal fats in cold climates); Ishihara 1961 (Balaenoptera acutorostrata; pancreatic lipase); Ishikawa 1958 (Cetacea; nitrogen absorption by oil), 1959 (Cetacea; oxygen absorption by oil); Itabashi & Takagi 1980 (Physeteridae; Physeter catodon; GLC separation of diacylglycerols & monoacylglycerols based on degree of unsaturation & positional placement of acyl groups); Itoh & Fukuzumi 1968 (Cetacea; quantitative analysis of fatty acid esters in oils by GLC); Itoh & Tsuyuki 1974a (Neophocoena phocoenoides; fatty acid composition of oil from different blubber areas; iodine No., acid No. & unsaponifiable matter); Iwasa & Mukai 1950 (Cetacea; pigments in oil); Jamieson & Reid 1967 (Physeter sp.; separation factors of acetates, alcohols & hydrocarbons); Jangaard et al. 1963a (Phoca vitulina; component fatty acids of blubber fat), 1963b (Hyperoodon ampullatus; fatty acid composition of blubber oil); Jangaard & Ke 1968 (Pagophilus groenlandicus; Cystophora cristata; principal fatty acids of depot & milk lipids); Jenness & Odell 1978 (Kogia breviceps; composition of milk; lipid, proteins, lactose & fatty acids; differs from others); John et al. 1980 (Pagophilus groenlandicus; plasma levels of growth hormones & free fatty acids; seasonal change; post-natal growth of pups); Kabaivanski 1955 (Cetacea; lipid); Kaduce et al. 1981 (Ursus maritimus; characterization of plasma lipids & lipoproteins); Kakinuma et al. 1950/1951 (Balaenoptera physalus; Physeter catodon; nutritional studies of oil on rats; specific dynamic action); Kanazu et al. 1969a (Stenella coeruleoalba; branched chain fatty acids in head oil), 1969b (Stenella coeruleoalba; higher branched chain fatty acids in head oil); Karl et al. 1978 (Kogia breviceps; compositional topography of melon & spermaceti organ lipids; wax ester & triglyceride composition of 3 regions of melon & fat-filled spermaceti organ); Karnovsky & Rapson 1947 (Arctocephalus pusillus; Fitelson method for "squalene" determination in oil); Kaufmann & Shoeb 1961 (Physeter sp.; 16:1 in oil); Kharkov 1931 (Pinnipedia; oil melting plant); Kizevetter 1953 (Pinnipedia; oils); Klem 1935 (Cetacea; biochemistry of oil); Kolchev & Chernomorski 1939 (Pinnipedia; extracting seed fat by the cold method); Kolchev & Marieva 1953 (Physeter catodon; lipid; water & total solid content of blubber); Komori & Morita 1951 (Balaenoptera borealis; brain sterols, cholesterol & unsaponifiable matter); Kovacs 1961 (Physeter macrocephalus; head, body & muscle oil; density, saponification No., iodine No. & unsaponifiable matter; fatty acid distribution); Kuo & Weng 1975 (Physeter sp.; Pinnipedia; temperature & frequency dependencies of ultrasonic velocity & absorption of sperm & seal oil); Kupke et al. 1979 (Marine mammals; differences in lipid & lipoprotein concentrations in venous & capillary blood); Kuwada & Kaneyuki 1952 (Cetacea; malodorous constituents of hardened oil); Kuznetsov 1962 (Marine mammal; fat disposition & its effect on animals ecology), 1979 (Tursiops truncatus; Delphinus delphis; Phocoena phocoena; chemoreception, short-chain acids); Lantos & Borruel 1973 (Leptonychotes weddelli; adaptive aspects of biosynthesis of corticosteroids; cholesterol esters, cholesterol, endogeneous cortisol, pregnenolone, progesterone, corticosterone & 18-hydroxycorticosterone); Lauer & Baker 1969a (Balaenoptera physalus; Delphinapterus leucas; gross composition & fatty acid constitution of milk); Lavigne et al. 1982 (Pagophilus groenlandicus; changes in composition & energy content of milk during lactation; fat, energy, protein & ash content); Lee et al. 1977 (Ursus maritimus; blood values; cholesterol, minerals, enzymes, carbohydrates & other haematologic parameters); Lee 1974 (Cetacea; lipid composition of Calanus hyperborealis; change with depth & season in Arctic Ocean); Legendre 1947 (Pinnipedia;

rendering oil); Leonov & Shestakova 1962 (Pinnipedia; products of oxidation of oil); Lesch 1969 (Balaenoptera physalus; Globicephala melaena; Delphinus delphis; development of neutral lipids & fatty acids of brain); Lesch & Bernhard 1966 (Megaptera novaeangliae; brain lipids; cortex & cerebellum lipids; cholesterol, cerebroside, sphingomyelin, lecithin & fatty acid composition of lipids), 1968 (Balaenoptera physalus; composition of neutral lipids & their fatty acids from brain; 5 regions of brain; individual phospholipids); Lesch et al. 1968 (Globicephala melaena; composition of phospholipids & their fatty acids from brain; white & grey matter; cholesterol); Levit & Vasil'eva 1965 (Physeter sp.; separation of fatty acids of oils & fats by centrifuging); Liberti et al. 1958 (Cetacea; fatty acid determination in fats by automatic electrometric titration); Litchfield 1968 (Ursus maritimus; Pagophilus groenlandicus; Phoca vitulina; Balaenoptera borealis; predicting the positional distribution of 22:5ω3 & 22:6ω3 in triglycerides), 1972 (Marine mammals; biological sonar; analysis of triglycerides); Litchfield et al. 1971 (Inia geoffrensis; Sotalia fluviatilis; biological sonar; comparative lipid patterns); Litchfield 1973 (Cetacea; taxonomic patterns of triglyceride structure of natural fats); Litchfield & Ackman 1973 (Tursiops truncatus; chromatographic analysis of isomeric isovalerate & isoamyl wax esters); Litchfield et al. 1971 (Delphinapterus leucas; isovaleryl triglycerides from blubber & melon oils; echolocation role; none, mono & diisovaleryl triglycerides; long-chain branched fatty acids); Litchfield & Greenberg 1974 (Berardius bairdi; Delphinapterus leucas; Delphinus delphis; Globicephala melaena; Grampus griseus; Inia geoffrensis; Kogia simus; Lagenorhynchus albirostris; Monodon monoceros; Phocoena phocoena; Phocoenoides dalli; Platanista gangetica; Pseudorca crassidens; Stenella plagiodon; Tursiops truncatus; comparative lipid patterns in melon fats; Ziphiidae, Physeteridae; Platanistidae; contain no isovalerate; others do), 1979 (Inia geoffrensis; compositional topography of melon lipids; wax esters & triglycerides; refractive collimation of echolocation sound beams); Litchfield et al. 1978 (Berardius bairdi; distinctive medium-chain wax esters, triglycerides & diacylglycerylethers in head fats; mandibular fat body, jaw, melon & dorsal blubber lipid), 1975 (Odontoceti; Delphinidae; Ziphiidae; Physeteridae; Platanistidae; Monodon monoceros; Feresa attenuata; Hyperoodon ampullatus; Lissodelphis borealis; Mesoplodon densirostris; Ziphius cavirostris; comparative lipid patterns in acoustical & non-acoustical fatty tissue; wax esters & triglycerides), 1973 (Tursiops truncatus; compositional topography of melon lipids; melon (4 layers) fat content in each layer & in collimation of ultrasonic pulses used for echolocation); Lok & Folkersma 1979 (Mesoplodon bidens; composition of wax esters & triacylglycerols in melon & blubber fats of young whale; diet change from triglycerides in milk to wax esters in natural food); Lombardi et al. 1971 (Arctocephalus australis; triglyceride content & fatty acid composition of oil); Lovern 1949 (Cetacea; oils; selective distribution of isovaleric acid), 1964 (Marine mammals; lipids); Lowry & Tinsley 1974 (Pinnipedia; Otariidae; bromine levels in lipids); Lu & Yang 1980 (Lipotes vexillifer; Tursiops sp.; lipid components & properties of melon oil; melon fatty acids & wax esters; iodine No. & unsaponifiable matter); Lygonis 1966 (Globicephala melaena; fat on serum cholesterol of man & rat); Lyubeznov & Popova 1971 (Cetacea; physicochemical & antibacterial properties of fat fractions); Maclean 1968 (Marine mammals; correlation of stereoisomers in present day & geologically ancient isoprenoid fatty acids); Magomaev 1966a (Pusa caspica; fat composition), 1966b (Pusa caspica; composition of fat), 1970 (Pusa caspica; temperature difference of density of oil); Magomaev & Omarov 1975 (Pusa caspica; fat content & fatty acid composition of subcutaneous fat, muscle & liver); Majima 1963 (Cetacea; polyunsaturated fatty acids on experimental hypercholesteremia of rats); Malins et al. 1972 (Tursiops truncatus; biosynthesis of triacylglycerols containing isovaleric acid); Malins & Varanasi 1972 (Tursiops gilli; isovaleric acid in acoustic tissues; triacylglycerols are resistant to pancreatic lipase; isopentadecanoic acid), 1975 (Marine mammals; biochemistry of lipids of acoustic tissues; review); Malins & Wekel 1970 (Marine mammals; lipid biochemstry of marine organisms; review); Malmbros & Wigand 1957 (Cetacea; fats on serum cholesterol of rats); Mangold & Malins 1960 (Callorhinus ursinus; fractionation of fats, oils & waxes from blubber oil by TLC); Margni et al. 1971 (Leptonychotes weddelli; seroproteins, glycoproteins, lipoproteins & immunoglobulins), 1972 (Leptonychotes weddelli; serum proteins, glycoproteins & lipoproteins); Maruyama 1965b (Cetacea; oil); Matsumura 1950/1951 (Balaenoptera physalus; dietary polymerized whale on human body); Matsuno 1964 (Balaenoptera physalus; whale heparin & its anticoagulants & lipemia-clearing activities); Mayzaud & Ackman 1978 (Pagophilus groenlandicus; 21:5ω3; derived from algae); Meara 1952 (Halichoerus grypus; component fatty acids of milk fat); Merino 1953 (Cetacea; composition & nutritive value of meat; lipid content, iodine No., saponfication No., energy value & unsaponifiable matter); Mills & Taylaur 1971 (Marine mammals; distribution & composition of serum lipoprotein of 18 spp.); Minato 1949 (Phoca vitulina; constituents of body oil; saponification No., unsaponifiable matter, iodine No. & vitamin A); Minato & Ikeda 1949 (Eumetopias jubata; bile; 3,7,12-triketocholanic acid); Mize et al. 1966 (Marine mammals; metabolism phytol-U-C-14 & phytanic acid-U-C-14); Mori et al. 1964 (Physeteridae; fatty acid & fatty alcohol composition of oil), 1966a (Physeter sp.; Hyperoodon rostratus; fatty acid & fatty alcohol composition of oil), 1966b (Physeter sp.; fatty acid & fatty alcohol in factory & laboratory oil), 1966c (Physeter sp.; fatty acid composition of waxes & glycerides from oil), 1966d (Physeter sp.; fatty acid & fatty alcohol composition of oil; branched C_{14} fatty acid), 1966e (Physeter sp.; fatty acid & fatty alcohol composition of head cavity oil & suika oil), 1965a (Physeter sp.; fatty acid composition of waxes & glycerides), 1966f (Physeter sp.; fatty acid composition of waxes & glycerides), 1966g (Mirounga leonina; fatty acid composition of blubber oil), 1965b (Physeter macrocephalus; composition of lipids of head cavity, blubber & meat; wax ester & glyceride content); Morii 1973 (Stenella coeruleoalba; free volatile fatty acids of stomach microorganisms), 1974a (Cetacea; fatty acid composition of various lipids of the dolphin), 1974b (Stenella coeru-

leoalba; fatty acid composition of micro-organisms from stomach), 1979a (Stenella coeruleoalba; free volatile fatty acids from micro-organisms from stomach), 1979b (Stenella coeruleoalba; Vibrio sp. from stomach; short & long-chain branched fatty acids from fish-squid extract), 1974c (Stenella coeruleoalba; fatty acid content in stomach fluid), 1979d (Stenella coeruleoalba; long-chain fatty acids from stomach contents; iso, anteiso & straight-chain fatty acids), 1980 (Stenella coeruleoalba; distribution of branched-chain fatty acids in organs of adult, nursing & unborn), 1981 (Stenella coeruleoalba; fatty acids in blood), 1982a (Stenella attenuata; fatty acids in milk; lipid content; short & long chain fatty acids), 1982b (Stenella coeruleoalba; fatty acids & fatty alcohols of triglycerides & wax esters in subcutaneous tissues); Morii & Kaneda 1982 (Stenella coeruleoalba; biosynthesis of branched fatty acids from branched-chain amino acids in subcutaneous tissue); Morii et al. 1954 (Physeter sp.; saponification of oil); Morii & Kanazu 1972 (Stenella attenuata; fatty acids in unborn, nurseling & adult); Morris 1973 (Physeter catodon; lipid structure of spermaceti organ; triglyceride content & fatty acid composition), 1975 (Physeter catodon; lipid content & fatty acid composition of spermaceti organ in calf & male & female adults; buoyancy regulator & acoustic lens); Morshtyn 1963a (Pagophilus groenlandicus; physical properties of oil from fat), 1963b (Pagophilus groenlandicus; technology of oil production from fat), 1967 (Pagophilus groenlandicus; lipid; technological characteristics), 1969 (Pagophilus groenlandicus; technology of fat production), 1973 (Pagophilus groenlandicus; changes in thickness & fat content of subcutaneous blubber); Mrockhov & Baidalinova 1974 (Balaenoptera physalus; B. borealis; chemical composition & nutritive value of meat; fat content); Mrosovsky 1981 (Marine mammals; body fat in pregnancy & lactation); Mukai 1950 (Cetacea; pigment extraction from oil), 1954 (Cetacea; fractionation of pigments of oil); Nagano et al. 1969 (Balaenoptera musculus; fatty acid composition; iso C_4-C_{12} fatty acids); Nakagawa 1971a (Cetacea; sialic acid in cartilage protein polysaccharide); Nakamura et al. 1968 (Balaenoptera physalus; separation & identification of fatty acid amides from visceral lipids); Nakamura & Toyomiza 1967 (Balaenoptera physalus; visceral lipid separation by silicic column chromatography), 1970 (Balaenoptera physalus; fatty acid amides in visceral lipid); Nakamura & Tsujino 1952 (Phocoenoides dalli; fatty acid composition of head mandibles & skin oil); Nedergaard et al. 1983 (Marine mammals; dietary essential fatty acids on active thermogenin content in brown adipose of rat); Nelson 1970 (Mirounga angustirostris; Pagophilus groenlandicus; lipid composition of blood; neutral & phospholipid composition of plasma & erythrocytes), 1971 (Tursiops truncatus; Halichoerus grypus; Phoca vitulina; lipid composition of plasma & erthrocytes; phospholipids), 1972a (Marine mammals; quantitative analysis of blood lipids), 1972b (Marine mammals; haematology; lipid composition & metabolism of erythrocytes), 1973 (Tursiops truncatus; fatty acid composition of plasma & erythrocytes; iso & multiple-branched fatty acids); Nelson & Barnett 1970 (Callorhinus ursinus; proximate composition of meat); Nevenzel 1970 (Cetacea; occurrence, function & biosynthesis of wax esters in marine organisms; review); Nikonova 1957 (Balaenoptera physalus; oil content of blubber); Norris & Dohl 1971 (Cetacea; chemistry of head oil & triglycerides; head oil contains isovaleric acid); Notevarp & Fyrst 1967 (Cetacea; fatty acid composition of oils & blubber fat); Okura & Goto 1957 (Physeter sp.; properties of blubber oil; iodine No., saponification No. & unsaponifiable matter); Okura & Mori 1957 (Balaenoptera musculus; B. physalus; B. borealis; property of oil; saponification No.; iodine No.; Japanese coast), 1957a (Physeter sp.; head & body oil; iodine No., saponification No. & unsaponifiable matter); Okura et al. 1957 (Physeter sp.; composition of commercial alcohols; coast of Japan), 1952a (Physeter sp.; property of oil from Japanese coastal whaling station; moisture, iodine No. & saponification No.), 1952b (Cetacea; properties of oil from Antarctic; water, acid No., saponification No. & iodine No.); Okura & Nagata 1952 (Physeter sp.; iodine No. of unsaponifiable matter from blubber, bone & head oil; Japan), 1957 (Balaenoptera musculus; B. physalus; properties of oil from Antarctic; yearly variations in iodine No. & saponification No.); Okura et al. 1957a (Balaenoptera musculus; oil content of blubber & iodine No. of oil), 1966a (Physeter sp.; comparison of alcohol composition between adjacent body parts; lipids of blubber, head sac & melon (suika); head blubber contains hydrocarbon), 1966b (Physeter sp.; alcohol composition of head oil), 1966c (Physeter sp.; alcohol composition of blubber oil), 1966d (Physeter sp.; alcohol composition of head & body oils; N. Pacific), 1966e (Physeter sp.; variations in alcohol composition in different individuals & parts of body); Okura & Nishimura 1957a (Physeter sp.; properties of Antarctic oil; saponification No. & iodine No.), 1957b (Physeter sp.; unsaponifiable matter of oil from various sites of an individual); Okura et al. 1966f (Physeter sp.; alcohol composition of head-sac & dorsal blubber oil; Antarctic); Okura & Taguchi 1957 (Physeter macrocephalus; oil content of blubber; Antarctic); Okura et al. 1957b (Balaenoptera physalus; oil content of blubber & iodine No. of oil; seasonal variation); Omote 1959 (Cetacea; absorption spectrum of molecular-distillate residue from liver oil); Ono & Toyama 1954 (Physeter sp.; moisture in brain & skin oil); Osipov 1931 (Pusa caspica; industrial fat; physicochemical constants), 1974 (Pagophilus groenlandicus; methods of detecting lipofuscin); Parodi 1982 (Leptonychotes weddelli; positional distribution of fatty acids in milk triglycerides); Pascal & Ackman 1971 (Physeter catodon; occurrence of 7-methyl-7-hexadecenoic acid, corresponding alcohols, 7-methyl-6-hexadecenoic acid & 5-methyl-4-hexadecenoic acid); Pathak et al. 1956 (Platanista gangetica; component acids of blubber & liver fats); Pedersen 1950 (Balaenoptera acutorostrata; content of saturated acids in oil), 1952a (Balaenoptera musculus; Megaptera nodosa; milk composition; lipid content; iodine No., saponification No., unsaponifiable matter, no sugar, ash, dry matter, free fatty acids & water), 1952b (Physeter catodon; lipid & moisture content of meat; saponification No., iodine No. & unsaponifiable matter), 1952c (Physeter catodon; lipid content of milk; iodine No., unsaponifiable matter & acid No.; no wax & fatty alcohols in milk), Peters & Wieske 1966

(Cetacea; polybranched fatty acids; 4,8,12-trimethyltridecanoic acid & 3,7,11,15-tetramethylhexadecanoic acid); Pihl 1952 (Cetacea; cholesterol content in food); Pilson & Kelly 1961 (Zalophus californianus; composition of milk; fat content); Pugsley & Harding 1938 (Pinnipedia; hair seal; oil); Puppione 1969 (Phoca vitulina; Leptonychotes weddelli; Zalophus californianus; Callorhinus ursinus; Eumetopias jubata; Odobenus rosmarus; physical & chemical characterization of serum lipoproteins), 1978 (Phoca vitulina; Mirounga angustirostris; serum lipoproteins during alimentary lipemia; electrophoresis of LDL, VLDL, HDL & chylomicrons); Puppione & Coggiola 1966 (Eumetopias jubata; Mirounga angustirostris; Phoca vitulina; serum lipoprotein distribution); Puppione et al. 1971 (Orcinus orca; serum lipoprotein classes (VLDL; LDL; HDL) & their lipid composition; electrophoretic patterns), 1970 (Pinnipedia; serum lipoprotein characterization); Puppione & Nichols 1970 (Zalophus californianus; Phoca vitulina; Odobenus rosmarus; Tursiops truncatus; characterization of chemical & physical properties of serum lipoproteins); Raie 1976 (Physeter sp.; location of ethylenic bonds in fatty/alkane compounds); Ramaiah 1965 (Callorhinus ursinus; quality & fatty acid composition of milk fats); Rankov & Iovchev 1954 (Delphinus delphis; yield & quality of oil depending on duration of melting time), 1955 (Delphinus delphis; oil content of subcutaneous fat; vitamin A); Reutenauer & Regent 1948 (Pinnipedia; rapid determination of iodine No. in oil); Ridgway et al. 1968 (Lagenorhynchus obliquidens; Phocoenoides dalli; Tursiops gilli; Tursiops truncatus; cholesterol levels); Riedman & Ortiz 1979 (Mirounga Angustirostris; changes in milk composition during lactation; lipid content; fatty acid composition); Riou 1947a (Pinnipedia; chemical & physical characteristics of oil); Robisch et al. 1972 (Monodon monoceros; differences in triacylglycerols from acoustic tissues & posterior cranial blubber); Rochon-Duvigneault 1940 (Cetacea; oil); Ros de Ursinos et al. 1953 (Physeteridae; separation of oil components by urea complexes); Rouzet 1969 (Physeteridae; identification & determination of unsaponifiable matter in oils & lanolins); Rzhavskaya & Alikseeva 1966 (Marine mammals; unsaponifiable matter determination); Rzhavskaya & Dubrovskaya 1973 (Marine mammals; polyunsaturated fatty acid determination); Rzhavskaya et al. 1977 (Physeter sp.; oxidation of fats in storage); Rzhavskaya & Makarova 1974 (Cetacea; effect of unsaponifiable matter in liver lipids on GLC separation of fatty acid methyl esters); Rzhavskaya & Mrochkov 1967 (Balaenoptera musculus; Balaenoptera physalus; Balaenoptera borealis; Megaptera nodosa; characteristics of lipids from various body parts; 25 ref.); Rzhekhin & Pogonkina 1966 (Balaenoptera physalus; fatty acid determination in blubber fats; Antarctic); Saiki 1953a (Berardius bairdi; fatty acid composition of blubber oil; acid No.; saponification No.; iodine No.; unsaponifiable matter), 1953b (Berardius bairdi; fatty acid composition of visceral oil; iodine No.), 1954a (Berardius bairdi; fatty acid composition of liver lipids; acetone-soluble & acetone-insoluble lipids); Saiki & Mori 1952 (Hyperoodon ampullatus; properties of oils from various body parts; saponification No., iodine No. & unsaponifiable matter), 1953a (Physeter sp.; fatty acid composition of head cavity oil; unsaponifiable matter, iodine No. & saponification No.), 1953b (Physeter sp.; fatty acid composition of bone oil & large intestine oil; unsaponifiable matter, saponification No. & iodine No.), 1953c (Hyperoodon ampullatus; fatty acid composition of head & jaw oils; saponification No., iodine No. & unsaponifiable matter), 1953d (Balaenoptera borealis; B. physalus; properties of oils from body parts; blubber, tongue, spinal cord, stomach, intestine, heart, rectum, liver & stomach contents; lipid content & unsaponifiable matter), 1953e (Physeter sp.; properties of oils from various body parts; unsaponifiable matter; average molecular weight), 1953f (Physeter sp.; properties of oil; various parts of an unborn; fat content of tissues & brain), 1956 (Balaenoptera physalus; fatty acid composition of Calanus cristatus collected from stomach contents; N. Pacific; lipid content; iodine No., saponification No. & unsaponifiable matter); Saiki et al. 1958 (Berardius bairdi; composition of fatty alcohols from blubber oil; density, specific gravity, saponification No., iodine No. & unsaponifiable matter; contains hydrocarbons & sterols); Sano et al. 1965 (Balaenoptera musculus; B. physalus; B. borealis; fatty acid; composition of oil); Sano 1966a (Balaenoptera physalus; Antarctic; fatty acid composition of blubber oil; multiple branched-chain & branched-chain unsaturated fatty acids), 1966b (Balaenoptera musculus; Antarctic; branched-chain fatty acids from bone oil; iso, anteiso & phytanic acids), 1966c (Balaenoptera physalus; B. borealis; Physeteridae; 3,7,11,15-tetramethylhexadecanoic acid in blubber oil), 1967a (Balaenoptera physalus; B. borealis; Physeter catodon; B. musculus; 4,8,12-trimethyltridecanoic acid in oil; Antarctic), 1967b (Balaenoptera physalus; 7-methyl-6-hexadecenoic acid in blubber oil), 1967c (Cetacea; 2,6,10,14-tetramethylpentadecanoic acid in oil), 1968 (Physeteridae; polyunsaturated fatty acids & alcohols in blubber oil); Sano & Murase 1965 (Balaenoptera borealis; fatty acid composition of blubber oil); Sato et al. 1967 (Cetacea; GLC of triglycerides); Sato & Tsuchuya 1977a (Physeter sp.; oil can cause seborrhea in rats), 1977b (Physeter sp.; seborrhea in rats caused by wax with different carbon atom chains); Schmidt-Nielsen et al. 1933 (Balaenoptera musculus; lipochrome in oil); Schmidt-Nielsen & Flood 1933 (Marine mammals; fat); Schmidt-Nielsen & Frog 1933 (Balaenoptera musculus; B. physalus; B. borealis; milk composition; lipid; protein & ash); Schusterman & Gentry 1971 (Zalophus californianus; development of a fatted male phenomena); Scow et al. 1973 (Marine mammals; incorporation of dietary fatty acids into milk triglycerides; mechanism & regulation); Senda 1953 (Physeter catodon; constituents of sperm oil); Shergin et al. 1967 (Pinnipedia; hairless seal; chemical composition of milk; lipid content); Shimao 1964 (Eumetopias jubata; bile salts; β-phocaecholic acid; dehydronorchenodeoxycholic acid); Shimma & Taguchi 1961 (Callorhinus ursinus; survey of liver oil & vitamin A content); Sidwell 1981 (Cetacea; chemical & nutritional composition of products; fatty acids; cholesterol); Sinclair 1981 (Inuit; Pinnipedia; reative importance of essential fatty acids of linolenic & linolenic families; studies with an Inuit diet); Singh & Gershbein 1969 (Physeter sp.; fatty acids of oils); Spen-

cer & Tallent 1973 (Physeter sp.; GLC-MS analysis of oil; wax esters triglycerides); Spencer 1979 (Physeter sp.; alkoxyl-acyl combination of wax esters from winterized oil by GLC-MS); Streibl et al. 1971 (Physeter sp.; composition of oil; wax ester separation); Stull et al. 1967 (Leptonychotes weddelli; lipids); Sumich 1983 (Eschrichtius robustus; cost of locomotion in migration); Suzuki et al. 1983 (Delphinus delphis; histological properties of myofibers of longissimus muscle; lipid oxidative metabolism; glycolytic metabolism); Suzuki & Mitsuhashi 1969 (Balaenoptera borealis; lipid composition in tendon; fatty acid content & composition; cholesterol & other sterols; alcohols, iodine No., acid No. & unsaponifiable matter); Takagi et al. 1976 (Physeter sp.; separation of wax esters according to degree of unsaturation by GLC); Takagi & Itabashi 1977 (Physeteridae; random combination of acyl & alcoholic groups in wax esters of oils); Takahashi et al. 1966 (Balaenoptera physalus; cardiolipin & its fatty acid composition); Takaoka et al. 1946 (Cetacea; head oil of dolphin; saponification No., iodine No., acid No. & unsaponifiable matter); Takaoka & Tsujino 1952 (Phoecoenoides dalli; properties of body oils & their volatile fatty acids); Takeda et al. 1957 (Balaenoptera physalus; relation iodine No. & refractive index of hydrogenated oil); Tedman 1983 (Leptonychotes weddelli; ultrastructure of mammary gland & size of fat droplets); Thueson 1953 (Balaenoptera musculus; Pinnipedia; cholesterol content of whale & seal oil); Tinoco 1982 (Pinnipedia; Cetacea; lipids); Tinyakov et al. 1975 (Physeter sp.; microstructure of milk; fat globules); Toyama & Takagi 1962 (Balaenoptera physalus; 20:5ω3, 22:5ω3 & 22:6ω3 acids in oil); Toyama & Takai 1954 (Balaenoptera glacialis; oil; density, specific gravity, acid No., saponification No., iodine No. & unsaponifiable matter); Toyomizu et al. 1963 (Cetacea; oil on the fatty acid composition of rainbow trout oil); Tsuchiya 1943 (Delphinus longirostris; polyunsaturated fatty acids in liver oil); Tsuchiya & Kaneko 1951 (Physeter sp.; hydrocarbon in unsaponifiable matter in liver fat); Tsuchiya & Kato 1950a (Delphinus longirostris; hydrocarbon, C_{44} H_{90}, in liver fat; Delphane), 1950b (Balaenoptera physalus; highly unsaturated hydrocarbon in liver fat, finene, C_{48} H_{78}; saponification No., iodine No., acid No., density & specific gravity of liver oil); Tsuchiya & Okubo 1953 (Pinnipedia; fatty acid composition of seal liver, heart & lung); Tsuchiya & Tanaka 1955 (Balaenoptera borealis; unsaponifiable matter in liver fat; hydrocarbons & cholesterol in liver); Tsujimoto 1916 (Pinnipedia; Saghalien seal oil); Tsujimoto & Koyanagi 1937 (Globicephala melaena; distillation of head oil under vacuum); Tsuyuki 1957 (Mirounga angustirostris; oils of various blubbers; density, specific gravity, iodine No. & saponification No.), 1958 (Mirounga angustirostris; component fatty acids of oil); Tsuyuki & Itoh 1966 (Mirounga leonina; oils in blubber), 1969a (Neomeris phocoenoides; oil content, fatty acid composition of oil; specific gravity, iodine No., saponification No. & unsaponifiable matter), 1969b (Peponocephala electra; fatty acid composition of oil; density, specific gravity, iodine No., acid No.& unsaponifiable matter), 1970 (Eubalaena glacialis; fatty acid composition of blubber, stomach, liver & tongue lipids), 1972 (Platanista gangetica; fatty acid composition of various blubber parts); Tsuyuki et al. 1964 (Eubalaena glacialis; fatty acid composition of liver oil); Tsuyuki & Itoh 1967 (Mirounga leonina; studies on oil in blubber), 1971 (Platanista gangetica; fatty acid components of oil), 1973 (Platanista gangetica; fatty acid components of blubber oil); Tsuyuki & Naruse 1963 (Eubalaena glacialis; fatty acid composition of oil), 1964 (Eubalaena glacialis; fatty acid composition of the brain; neutral lipid & phospholipids); Tveraaen 1935 (Balaenoptera musculus; chemical analysis of oils); Tyutyunnikov & Grechishnikova 1965 (Cetacea; low-molecular weight fatty acids in oil); Ueno & Iwai 1939 (Pinnipedia; oil; Antarctic); Ueno & Matsushima 1958 (Balaenoptera acutorostrata; composition of oil; acid No., iodine No., saponification No. & fatty acids); Ueno & Tsuchikawa 1942 (Balaenoptera physalus; composition of completely hard oil; Antarctic); Vallayathan et al. 1969 (Pagophilus groenlandicus; levels of certain metabolites & enzymes in blood; lipid, cholesterol, lipase & esterase); Van Der Zande & De Ruiter 1983 (Phoca vitulina; quantitation of PCB by microwave plasma detection; analysis in PCB in blubber lipid); Varanasi et al. 1973 (Tursiops truncatus; isomeric composition of diisovaleryl-glycerides; specificity for biosynthesis of 1,3-diisovalerylglycerides; deposited in discreet regions (acoustic window) & mandibular tissues); Varanasi & Malins 1969 (Phocoena phocoena; naturally-occurring diol lipids; dialkoxypentanes in jaw oil); Varanasi et al. 1975 (Stenella graffmani; molecular basis for formation of lipid sound-lens in echolocating); Varanasi & Malins 1970a (Tursiops gilli; unusual wax ester from mandibular canal; isovaleric- & isopentyl alcohol-containing wax ester), 1970b (Phocoena phocoena; ester- & ether-linked lipids in mandibular canal; occurrence of isovaleric acid in glycerolipids; isopentadecanoic acid in neutral lipids), 1971 (Tursiops gilli; differences in triacylglycerrols & wax esters of acoustic (mandibular canal & melon) & blubber tissues; role of lipids in bioacoustic structures), 1972 (Tursiops gilli; triacylglycerols characteristics of acoustic tissues; molecular structure of diisovalerylglyceride; role in sound transmission through lipid-protein matrices), 1974a (Tursiops gilli; structure of phopholipids & triacylglycerols containing long-chain iso acids; positional fatty acid distribution in triglycerides & phospholipids (PC, PE & PS)), 1974b (Tursiops truncatus; distribution & metabolism of wax esters in putative acoustic tissues; 1,3-diisovalerylglycerides; acoustic window), 1975 (Delphinus delphis; brain lipids; phosphoglycerides rich in isovaleric & long-chain iso acids); Varanasi et al. 1982 (Delphinus delphis; role of isovaleryl lipids in channeling sound in the melon); Viale 1979 (Ziphius cavirostris; Balaenoptera physalus; Delphinus delphis; excretory function of skin; lipid synthesis); Vilyams & Makhrov 1935 (Pusa hispida; chemical properties of oil); von Gaver 1923 (Pinnipedia; oil); Wahnon 1956 (Cetacea; head oil triglycerides; uses of oil); Waldorf & Vedros 1979 (Callorhinus ursinus; fatty acid content of depot fat); Wedmid 1975 (Cetacea; characterization of isovalerylglycerides using NMR with lanthanide shift reagents); Wedmid & Litchfield 1976 (Delphinus delphis; Globicephala melaena; Grampus griseus; Langenorhynchus albirostris; Lissodelphis borealis; Pseudorca

crassidens; Stenella plagiodon; Sotalia fluviatilis; Tursiops truncatus; Phocoena phocoena; Phocoenoides dalli; Delphinapterus leucas; Monodon monoceros; positional analysis of triglycerides using PMR with shift reagents); Wedmid et al. 1973 (Globicephala melaena; heterogeneity of lipid composition & within cephalic melon; acoustical function), 1972 (Globicephala melaena; biological sonar; heterogeneity of lipid composition within cephalic melon); Wellendorf 1963 (Physeter macrocephalus; composition of spermaceti); West et al. 1979a (Phoca vitulina; Pusa hispida; Histriophoca fasciata; fatty acid composition of blubber; Bering Sea), 1972b (Odobenus rosmarus; fatty acid composition of blubber fat in males & lactating & non-lactating females); Wilber 1948 (Marine mammals; blood & tissue lipids; Arctic animals in relation to post-hibernation fat depletion), 1952 (Callorhinus ursinus; blubber), 1954 (Marine mammals; lipids of tissues); Wilber & Musacchia 1950 (Pusa hispida; Odobenus rosmarus; comparison of lipids); Wilke 1958 (Callorhinus ursinus; fat content of milk); Williams 1981 (Tursiops truncatus; dietary deficiencies of captive; phosphatidyl choline & phosphatidyl ethanolamine in liver & muscle; 20:4ω6; prostaglandins); Williams et al. 1977 (Tursiops truncatus; fatty acid composition of food & tissues closer to land animals than marine animals); Williams 1949 (Physeter sp.; analysis of fatty oils with hydrocarbons); Williams & Makhrov 1935 (Pinnipedia; chemical study of oil); Winter & Nunn 1950a (Mirounga leonina; component fatty acids of blubber oil), 1950b (Mirounga leonina; component fatty acids in blubber oil; distribution in body of mature females, mature males; nonpregnant females & female pups), 1950c (Hydrurga leptonyx; composition of blubber fat), 1953a (Lobodon carcinophagus; composition of blubber fat), 1953b (Mirounga angustirostris; Hydrurga leptonyx; Halichoerus grypus; Pagophilus groenlandicus; Lobodon carcinophagus; fatty acids composition of oil; variation & relationship of blubber fats & other seals); Wo 1973 (Inuit; nutritional status to fatty acids, vitamins A & E); Worthy 1982 (Pagophilus groenlandicus; energy sources during the post-weaning period; fat); Worthy & Lavigne 1983 (Pagophilus groenlandicus; energetics of fasting & subsequent growth in weaned); Yamada 1946 (Physeter macrocephalus; Megaptera nodosa; Balaenoptera musculus; B. physalus; proximate composition of the hide; distribution of fat in the corium layers); Yasugi et al. 1982 (Physeter catodon; 2-O-acylgalactosyl ceramide in brain), 1983 (Cetacea; brain cerebrosides; 2-O-acylgalactosyl ceramide); Yoshida et al. 1965 (Physeter sp.; nutritive value of oil in poultry diets; available energy of fatty acids); Young 1976 (Marine mammals; fat, energy & mammalian survival); Yurkowski & Brockerhoff 1966 (Pinnipedia; fatty acid distribution of triglycrides determined by deacylation with methyl magnesium bromide); Zama 1963 (Physeter catodon; Balaenoptera borealis; brain lecithin, cephalin, phosphatidic acid & sphinomyelin & their fatty acid compositions); Zama & Igarashi 1956 (Physeter catodon; brain cephalins & phosphatidyl inositol), 1957 (Balaenoptera borealis; fatty acid composition of brain phoshatidyl inositol, phosphatidyl serine & phosphatidyl ethanolamine), 1959a (Balaenoptera borealis; brain phosphatidyl serine & phosphatidyl ethanolamine & their fatty acid composition), 1959b (Balaenoptera borealis; brain inositol phosphatide & fatty acid composition).

MILK AND LACTATION

Ackman & Burgher 1963 (Halichoerus grypus; component fatty acids of milk); Ackman et al. 1968 (Balaenoptera physalus; lipid content & fatty acid composition of triglycerides (positional) & phospholipids of milk), 1971b (Tursiops truncatus; fatty acid composition of milk triglycerides); Ackman & Hooper 1968 (Balaenoptera physalus; Pagophilus groenlandicus; Halichoerus grypus; trimethytridecanoic, phytanic & pristanic acids of milk & blubber; L,D,D- & D,D,D-diastereomers); Ackman & Jangaard 1965 (Halichoerus grypus; fatty acid composition of blubber from lactating female); Addison & Brodie 1977 (Halichoerus grypus; DDT & PCB in maternal blubber, milk & pup blubber; Sable I. N.S.); Amoroso et al. 1951b (Halichoerus grypus; lactation); Amoroso & Matthews 1951 (Halichoerus grypus; growth from birth to weaning), 1952a (Halichoerus grypus; lactation & reproduction), 1952b (Halichoerus grypus; lactation & reproduction), Anas & Wilson 1970a (Callorhinus ursinus; PCB, dieldrin, DDT & metabolites in unborn pup blubber, ingested milk & in muscle, brain, liver & blubber of nursing pups); Ando et al. 1979 (Ursus arctos yesoensis; general composition & chemical properties of main components of milk; casein; water, total protein, whey protein, fat, lactose, ash, Ca, P, Na, K, Fe, Mg & specific gravity); Ashworth et al. 1966 (Callorhinus ursinus; spp. difference in composition of milk); Bailey et al. 1980 (Pagophilus groenlandicus; neonatal changes in tissue levels of carbohydrate & lipid in pups blubber during nursing & fasting); Baker et al. 1963 (Ursus maritimus; gross composition & fat constitution), 1967 (Ursus maritimus; electrophoresis of protein fractions of milk), 1963a (Ursus maritimus; carbohydrate content of casein); Baker & Lauer 1971 (Pagophilus groenlandicus; Balaenoptera physalus; Ursus maritimus; carbohydrate content of casein); Baker et al. 1970 (Pagophilus groenlandicus; Sr-90 & Cs-137 in milk; Alaska); Belov 1969 (Pagophilus groenlandicus; Cystophora cristata; microstructure of lactating gland); Bennich et al. 1957 (Cetacea; enzymic hydrolysis of casein; elementary composition; amino acid composition; carbohydrate content); Ben Shaul 1962 (Cystophora cristata; Pagophilus groenlandicus; Halichoerus grypus; Zalophus californianus; milk composition); Bjornhag et al. 1979 (Cetacea; Pinnipedia; post-natal growth rate correlations with milk composition; protein; lipid; lactose); Blaxter 1961 (Pinnipedia; lactation & growth of young; milk & its secretion); Bock et al. 1968 (Halichoerus grypus; Phocoena phocoena; amino acid composition of milk); Boulva & McLaren 1979 (Phoca vitulina; lactation period); Boyd 1983 (Halichoerus grypus; luteal regression; follicle growth & concentration of some plasma steroids during lactation; progesterone & estradiol-17β; estrus); Brockerhoff & Ackman 1967 (Pagophilus groenlandicus; Balaenoptera physalus; positional distribution of isomers of monoenoic fatty acids in glycerolipids of harp seal depot & fin whale milk); Bryden 1968b (Mirounga leonina; lactation & suckling in relation to early growth); Cama & Meara 1953 (Balaenoptera physalus; milk & blub-

ber fat content; composition of fatty acids in milk & blubber fat); Cavagnolo & Vedros 1979 (Callorhinus ursinus; levels of immunoglobulin (IgM, IgG & IgA) in serum & colostrum in adult & immature); Chapskii 1965c (Pagophilus groenlandicus; initial stage for the post-natal development; White Sea); Condy 1981a (Mirounga leonina; post-natal development & growth weaning; molting); Cook & Baker 1969 (Pagophilus groenlandicus; composition & pesticide residue of milk); Dosako et al. 1983 (Callorhinus ursinus; protein; carbohydrates & energetics); Eichelberger et al. 1940b (Cetacea; composition of dolphin's milk); Engelhardt & Ferguson 1980 (Pagophilus groenlandicus; Halichoerus grypus; adaptative hormone changes during post-natal period; plasma T_3, T_4, cortisol, aldosterone & Na; milk T_3 & T_4; enhanced lipolysis; endocrine regulation of lactations); Evans 1959 (Marine mammals; composition of milk; general); Gaskin et al. 1973 (Phoca vitulina; Hg, o,p-DDT & PCB in depot fat of lactating females & males; Bay of Fundy & Gulf of Maine); Glass & Jenness 1971 (Mirounga angustirostris; Pagophilus groenlandicus; fatty acid composition of milk); Glass et al. 1967 (Leptonychotes weddelli; fatty acid composition of milk fats); Gregory et al. 1955 (Balaenoptera sibbaldi; B. musculus; lactose, ash, Cl, P, Na, K, Mg, fat content, casein, water-soluble protein, non-protein nitrogen, vitamin B_6 & B_{12}, thiamine, pantothenic acid, biotin, riboflavin & nicotinic acid); Jangaard & Ke 1968 (Pagophilus groenlandicus; Cystophora cristata; principal fatty acids of depot fat & milk fats); Jangaard et al. 1967 (Marine mammals; seasonal changes in fatty acid composition in milk lipids); Jenness 1974 (Marine mammals; composition of milk; lactation; a comprehensive treatise); Jenness & Odell 1978 (Kogia breviceps; composition of milk; citrate, lactose & fatty acids; casein electrophoresis; DDT, dieldrin & PCB 1203); Jenness & Sloan 1970 (Marine mammals; composition of milk; review); Jenness et al. 1972 (Ursus maritimus; comparative aspects of milk from 4 bear spp.), 1981 (Enhydra lutris; composition of milk); Johnson 1975 (Zalophus californianus; lactose-metabolizing enzymes in milk & mammary gland; α-lactalbumin; disaccharides; lactose metabolism); Johnson et al. 1972 (Zalophus californianus; lactose synthetase in mammary gland; uridyl transferase, galactosyl transferase & galactose-1-phosphate; no lactose); Jones et al. 1976 (Pagophilus groenlandicus; DDT, dieldrin, PCB & Hg residues in liver, kidney, brain & blubber of male, female & lactating adults & neonatals); Kerry & Messer 1968 (Arctocephalus tasmanicus; A. forsteri; Mirounga leonina; intestinal glycosidases; lactase in milk); Khuzin & Iablokov 1963 (Cystophora cristata; digestive track during feeding of milk); Kolesnik & Timofeema 1980 (Callorhinus ursinus; growth, nutrition & production; Tyuleny I., Russia); Kooyman & Drabek 1968 (Leptonychotes weddelli; milk, blood & urine constituents); Lauer & Baker 1969a (Balaenoptera physalus; Delphinapterus leucas; gross composition & fatty acid constitution), 1969b (Marine mammals; mineral constitution of milk), 1972 (Marine mammals; electrophoresis of casein), 1977 (Ursus maritimus; Pagophilus groenlandicus; amino acid composition of casein); Lavigne et al. 1982 (Pagophilus groenlandicus; changes in composition & energy content during lactation; fat & energy change; protein & ash content); Le Boeuf & Ortiz 1977 (Mirounga angustirostris; composition of milk); Linzell & Peaker 1971 (Marine mammals; bibliography; mechanism of milk secretion; review); Lyall-Watson 1962 (Odobenus rosmarus; Zalophus californianus; Arctocephalus pusillus; Phoca vitulina; Mirounga angustirostris; animal milk analysis & hand-rearing technique); Matthews 1950a (Halichoerus grypus; process of lactation during September & October), 1950b (Halichoerus grypus; natural history & lactation); Meara 1952 (Halichoerus grypus; component fatty acids of milk fat); Morii 1982a (Stenella attenuata; fatty acids & lipid content of milk, short- & long-chain fatty acids); Mrosovsky 1981 (Marine mammals; body fat during pregnancy & lactation); Ohta et al. 1983 (Balaenoptera physalus; composition of milk); Palmeter 1969 (Marine mammals; what regulates lactose content in milk?); Parodi 1982 (Leptonychotes weddelli; positional distribution of fatty acids in triglycerides of milk); Peaker & Goode 1978 (Arctocephalus tropicalis gazella; composition of milk; lactose, Na, K, Cl, Ca, Mg, PO_4 & citrate; 0-26 days post partum); Pedersen 1952a (Balaenoptera musculus, Megaptera nodosa; milk composition; lipid content; water, ash, dry matter, no sugar, iodine No., saponification No., unsaponifiable matter & free fatty acids), 1952c (Physeter catodon; lipid content & properties of milk; iodine No., unsaponifiable matter, saponification No. & acid No. of milk fat); Perez & Mooney 1981 (Callorhinus ursinus; reproduction, energetics & food consumption during lactation); Pilson 1965 (Pinnipedia; Otarioidea; absence of lactose from milk), 1967 (Marine mammals; search for sea mammal's milk); Pilson & Kelly 1961 (Zalophus californianus; composition of milk; glucose, casein, no lactose, fat, protein, solids & ash); Pilson & Waller 1970 (Stenella plagiodon; spinner porpoise; composition of milk); Popov 1971 (Pinnipedia; causes & dimensions of natural mortality of young during lactation); Purdie 1885 (Cetacea; porpoise; chemical composition of milk); Racadot 1962 (Leptonychotes weddelli; several cell types of anterior lobe of pituitary during gestation & lactation); Ramaiah 1965 (Callorhinus ursinus; quality & fatty acid composition of milk fats); Riedman & Ortiz 1979 (Mirounga angustirostris; changes in milk composition during lactation; water, protein, fat & reducing sugar content; fatty acid composition); Schmidt-Nielsen & Frog 1933 (Balaenoptera borealis; B. musculus; B. physalus; composition of fat in milk); Schmidt et al. 1971 (Callorhinus ursinus; lactose synthetase activity in milk); Scow et al. 1973 (Marine mammals; incorporation of dietary fatty acids into milk triglycerides; mechanism & regulation); Shaughnessy 1974a (Mirounga leonina; electrophoresis of milk & blood proteins); Shaw 1971a (Tursiops truncatus; neutral carbohydrates in milk; lactose, D-glucose, myo-inositol & scyllo-inositol); Shergin et al. 1967 (Pinnipedia; chemical composition of hairless seal milk); Shun'ichi et al. 1983 (Callorhinus ursinus; composition of carbohydrate & protein); Siversten 1934 (Marine mammals; chemical composition); Stewart et al. 1983 (Pagophilus groenlandicus; determining lactose content); Takemura 1927a (Balaenoptera physalus; Balaenoptera borealis; protein content of milk; specific gravity; freezing point); Tedman 1983 (Leptonychotes weddelli; ultrastructure morpho

logy of mammary gland; size distribution of fat droplets in milk); Tedman et al. 1981 (Leptonychotes weddelli; milk intake estimation by tritiated water & Na-22 turnover); Thomas & De Master 1983 (Leptonychotes weddelli; parameters affecting pup survival to weaning); Tinyakov et al. 1975 (Physeter catodon; microstructure of milk); Tomilin 1946 (Cetacea; nutrition; lactation); Van Horn & Baker 1971 (Pagophilus groenlandicus; effects of stage of lactation on composition of milk); West et al. 1979b (Odobenus rosmarus; fatty acid composition of skin & blubber fat of males & lactating & non-lactating females); White 1953 (Cetacea; composition of milk); Wilke 1958 (Callorhinus ursinus; fat content of milk); Woodward 1976 (Marine mammals; bibliography; chemistry of casein; review); Yamauchi 1976 (Marine mammals; milk constituent differences); Yoshida & Nakamura 1977 (Halichoerus grypus; PCB patterns in milk); Zenkovich 1938 (Cetacea; milk of large spp.).

MINERALS

Ando et al. 1979 (Ursus arctos yesoensis; general composition & chemical properties of main components of milk; Ca, P, Na, K, Fe, Mg & ash); Beck 1956 (Mirounga leonina; copper content of blood & liver), 1961 (Megaptera nodosa; liver copper levels of unborn, newly born & mother); Bentley 1963 (Megaptera nodosa; composition of urine during fasting; K & Na); Blaxter 1961 (Pinnipedia; lactation & growth of young; mammary gland & its secretion); Bradley & Bing 1942 (Phoca vitulina; renal function during asphyxial ischemia & pyrogenic hyperemia); Bradley et al. 1950 (Phoca vitulina; water & electrolyte excretion), 1954 (Phoca vitulina; renal excretion of Na, K & water; effect of apnea on Na, K & water loading; pitressin & mercurial diuresis); Bullier 1935 (Phoca vitulina; NaCl poisoning of captive); Celliers 1961 (Cetacea; chemical composition of products; Mn, Fe, Cu, Co, Cl, P, Ca, Mg, K, Na & proximate composition); Costa 1978 (Enhydra lutris; ecological energetics water & electrolyte balance), 1982 (Enhydra lutris; energy, nitrogen & electrolyte flux; sea water drinking); Costa & Ortiz 1982 (Mirounga angustirostris; blood chemistry hemeostasis during prolonged fasting); Davis et al. 1983 (Leptonychotes weddelli; renal filtration rate & hepatic blood flow in voluntary diving); de Monte & Pilleri 1972 (Inia geoffrensis; Platanista indi; P. gangetica; haematological plasmic & urinary values); Dubois et al. 1948 (Cetacea; intermediary carbohydrate metabolism; distribution of acid-soluble phosphorus & enzymes); Eadie & Kirk 1962 (Mirounga leonina; Na & K concentrations in plasma & blood cells); Eichelberger et al. 1940a (Cetacea; distribution of electrolytes & water in blood of dolphins), 1940 (Tursiops truncatus; distribution of electrolyte & water in skeletal muscle); Engelhardt & Ferguson 1980 (Pagophilus groenlandicus; adaptive hormone changes during the post-natal period; salt balance); Engelhardt & Geraci 1978 (Pagophilus groenlandicus; effects of experimental vitamin E deprivation; on Na, electrolyte & molting patterns); Eubanks et al. 1976 (Ursus maritimus; serum Ca, P & glucose); Falconer et al. 1983 (Phocoena phocoena; trace metals; Cu, Zn, Hg & Cd); Fetcher & Fetcher 1942 (Tursiops truncatus; experiments on osmotic regulation); Furuhashi 1927 (Cetacea; total P, Cl & S in urine); Geraci 1972b (Pagophilus groenlandicus; Zalophus californianus; hyponatremia, dietary requirement for NaCl; effects ACTH & Na level); Geraci et al. 1969 (Delphinapterus leucas; Tursiops truncatus; serum constituents; Na, Cl, Ca, P, nitrogeneous compounds, proteins & enzymes), 1979 (Pusa hispida; age, condition, sampling time & method on plasma constituents of free-ranging; Na, Cl, Ca, PO_4, triglyceride, cholesterol, uric acid, BUN, glucose, alkaline phosphatase & aspartate aminotransferase); Gray et al. 1951a (Cetacea; Ca, P, essential amino acids & 5 vitamins in water-soluble solids), 1951b (Physeter catodon; Balaenoptera borealis; B.physalus; Megaptera nodosa; composition of liver extracts; S, P, Na, K, Ca, Mg, Fe, Al, Cl, & B vitamins); Gregory et al. 1955 (Balaenoptera sibbaldi; B. musculus; composition of milk; P, Na, K, Mg, proteins, several vitamins & lipid content); Guttman 1955 (Cetacea, extract & enzymic hydrolysates of liver; Ca, P, Cu, Fe, Co, F, N & 7 vitamins); Halasz et al. 1974 (Phoca vitulina; renal recovery from ischemia); Halloran & Pearson 1972 (Ursus arctos; blood chemistry; Ca, P, Na, K, Cl & other constituents; kidney function); Haugen 1976 (Pinnipedia; Phocidae; effect of CO_2 & H ion concentration on smooth muscle in brain arteries); Hiatt & Bradley 1941 (Phoca vitulina; control of glomerular function); Hiatt & Hiatt 1942 (Phoca vitulina; effect of food on glomerular filtration rate & renal blood flow); Hong et al. 1982a (Phoca vitulina; effect of anoxia & low pH on organic ion transport & electrolyte distribution in kidney slices), 1981 (Phoca vitulina; effect of nitrogen & low pH on organic ion transport & electrolyte distribution in kidney slices), 1982b (Pusa sibirica; P. hispida; renal function; Na, K & Cl); Hui 1981 (Delphinus delphis; water consumption & water flux; metabolic water; blood Na); Hunter & Madin 1978 (Callorhinus ursinus; clinical blood values; fresh vs. frozen serum; P, total protein; globulin, creatinine, cholesterol & bilirubin); Irving 1935a (Marine mammals; salt excretion); Kaegi et al. 1980 (Pinnipedia; metallothionein metal thiolate protein); Keil & Boerma 1964 (Physeter macrocephalus; F content in dentin & cementum); Keyes et al. 1971a (Callorhinus ursinus; analysis of urine); Kooyman & Drabek 1968 (Leptonychotes weddelli; milk, blood & urine constituents); Koschier et al. 1978 (Phoca vitulina; organic anion transport by renal cortical slices; p-aminohippurate); Krogh 1939 (Marine mammals; osmotic regulation); Kusakari & Tsutsui 1927 (Balaenoptera physalus; Ca, Mg & P in organs), Ladd et al. 1951 (Phoca vitulina; filtration rate & water diuresis, diving); Lauer & Baker 1969b (Marine mammals; mineral composition of milk); Lee et al. 1977 (Ursus maritimus; blood value; Na, K, Cl, Mg, Ca, P, enzymes, proteins, carbohydrate & cholesterol), 1977a (Zalophus californianus; metallothionein & subcellular localization of Hg & Cd in liver & kidney; nuclear fraction); Lowrance et al. 1956 (Phoca vitulina; anoxic anoxia & apnea in the renal function); Lowry & Tinsley 1974 (Pinnipedia; Otariidae; bromine levels in lipids); Magomaev & Olenchenko 1971 (Pusa caspica; 17 elements in meat, viscera & blood); Malvin & Rayner 1968 (Cetacea; renal function & blood chemistry); Malvin et al. 1978 (Pinnipedia; Tursiops sp.; Eumetopias jubata; renin & aldosterone levels;

correlation between urinary Na & plasma renin; regulation of salt balance); Martin et al. 1976 (Zalophus californianus; Hg-Se-bromine imbalance in immature parturients; liver & kidney of premature pups, normal females & pups; Hg, Se, Br, Cd, Ag, Cu, Fe, Zn, Mn, K, Na, Cr & Mg); Medway & Geraci 1965 (Tursiops truncatus; blood chemistry; whole blood, serum & plasma Na, Cl, albumin, BUN & α_1- , α_2- and β-albumin); Merino 1953 (Cetacea; composition & food value of meat; P, K, Na, Cl, PO_4, Ca, Mg, S & proximate composition; physical lipid values), 1954 (Cetacea; composition & nutritive value of meat; proximate composition; P, K, Na, Cl, Mg, Ca & S); Mishima et al. 1977 (Marine mammals; concentration of trace metals in tissues; Syowa Station, Antarctica); Mrochkov & Baidalinova 1974 (Balaenoptera borealis; Balaenoptera physalus; chemical composition & food value of meat; Co, Mn & Sn); Murdaugh et al. 1961a (Phoca vitulina; volume receptors & post-prandial diuresis), 1967 (Phoca vitulina; cation transport in the erythrocyte), 1961b (Phoca vitulina; cessation of renal function during diving of trained); Odell 1979 (Tursiops truncatus; Kogia simus; K. breviceps; ecology & population biology; S.E. Florida; trace metals); Olafson & Thompson 1974 (Halichoerus grypus; Callorhinus ursinus; isolation of heavy metal-binding proteins); Olenchenko 1972a (Pusa caspica; growth dynamics of water volume & mineral content of tissues & organs); Ortiz et al. 1981 (Mirounga angustirostris; milk intake index of parental investment); Osawa et al. 1981 (Physeter catodon; structure of dentine; Ca & P); Page et al. 1954 (Phoca vitulina; variation in infiltration rate on urinary concentrating mechanism; pitressin); Peaker & Goode 1978 (Arctocephalus tropicalis gazella; composition of milk; Na, K, Cl, Ca, Mg, & PO_4; 0-26 days post partum; 40% fat); Pernia et al. 1981 (Mirounga angustirostris; glomerular filtration rate in fasting weaned pups); Ridgway 1972 (Pinnipedia; homostasis in aquatic environment); Ridgway et al. 1968 (Lagenorhynchus obliquidens; Phocoenoides dalli; Tursiops truncatus; T. gilli; chemical & physical properties of blood; Na, Cl, K, cholesterol & glutamic oxaloacetate transaminase & BUN); Ridlington et al. 1981 (Marine mammals; metallothionein characterization; Cu-binding proteins); Robin et al. 1971 (Phoca vitulina; cation transport & energy metabolism in high Na & low K erythrocyte); Sachitananthan & Hiyama 1965 (Balaenoptera physalus; concentration of γ-emitting nuclides; Zn, Mn, K & Cs; Arctic); Schmidt-Nielsen & Johansen 1932 (Balaenoptera physalus; composition of urine; NH_3, urea, uric acid, hippuric acid, ash, total solids, S, PO_4, Cl, Ca, Mg, Na & F); Schneppenheim 1980 (Lobodon carcinophagus; fluoride concentration; Antarctica); Selvig & Selvig 1962 (Pinnipedia; mineral content of cementum); Shergin et al. 1967 (Pinnipedia; hairless seal; chemical composition of milk; Ca); Sidwell 1981 (Cetacea; chemical & nutritional composition of products; trace elements); Smith 1936 (Phoca vitulina; composition of urine); Soevik & Braekkan 1981 (Marine mammals; F contents in products); Stewart & Lavigne 1981a (Pagophilus groenlandicus; energetics of nursing; energy transfer & female condition); Takemura 1927b (Cetacea; synovial fluid; Na, K & Ca); Tarasoff & Toews 1972 (Phoca vitulina; osmotic & ionic regulatory capacity of kidney); Tower & Young 1973 (Balaenoptera physalus; Physeter catodon; interspecies correlation of cerebral cortical oxygen consumption, acetylcholinesterase activity & chloride content); Vallayathan et al. 1969 (Pagophilus groenlandicus; levels of hemoglobin iron, other metabolites & enzymes in the blood; Fe); Versaggi 1975 (Erignathus barbatus; Mirounga angustirostris; Phoca vitulina; Eumetopias jubata; Zalophus californianus; Odobenus rosmarus; intraosseous architecture; relation to acid-base homeostasis); Viale 1979 (Ziphius cavirostris; Balaenoptera physalus; Delphinus delphis; excretory function of skin; salt excretion; lipid synthesis); Wollenberger et al. 1958 (Cetacea; orthophosphate & phosphocreatine content of heart of porpoise); Worthy & Lavigne 1982 (Pagophilus groenlandicus; changes in blood properties of fasting & feeding pups after weaning; Ca; 0-82 days), 1983 (Pagophilus groenlandicus; energetics of fasting & subsequent growth in weaned pups).

MOLTING

Ashwell-Ericksen & Elsner 1981a (Phoca vitulina; Phoca largha; energy cost of free existince in Bering Sea); Ashwell-Ericksen et al. 1981 (Phoca vitulina; Phoca largha; nutritional & hormonal aspects of molting), 1981a (Phoca vitulina; Phoca largha; nutritional & metabolic aspects of molting); Belkovitch 1964 (Pinnipedia; structure of cutaneous integuments); Botta et al. 1982a (Pagophilus groenlandicus; meat; molting); Boulva & McLaren 1979 (Phoca vitulina; biology; E. Canada); Brown et al. 1983 (Tursiops truncatus; epidermal cell proliferation); Chekumova 1963 (Pagophilus groenlandicus; peculiarities of structure of skin & its fat connective tissues); Condy 1981a (Mirounga leonina; post-natal development & growth; molting); Dargoitz et al. 1978 (Cetacea; O_2 consumption by skin & problem of cutaneous respiration); Drescher 1978 (Phoca vitulina; skin lesions; North Sea); Engelhardt 1977d (Pinnipedia; phocid; changes in physical & chemical characteristics of blood as related to molt); Engelhardt & Geraci 1978 (Pagophilus groenlandicus; vitamin E deprivation on molting patterns & Na); Feltz & Fay 1966 (Phoca vitulina; Erignathus barbatus; Odobenus rosmarus; Eumetopias jubata; thermal requirements in vitro of epidermal cells); Firth & Hicks 1973 (Marine mammals; interspecies variation in fine structure & enzyme histochemistry of transitional epithelium); Frisch & Oritsland 1968 (Pagophilus groenlandicus; insulative changes in pup during molting); Garman et al. 1983 (Inia geoffrensis; cutaneous gout); Hubbard 1968 (Pinnipedia; husbandry & laboratory care); Leedar & Bradbury 1971 (Pinnipedia; discontinuous nature of epicuticle on the surface of keratin fibres); Ling 1965a (Mirounga leonina; hair growth & molting), 1965b (Mirounga leonina; integument & molting process), 1965c (Arctocephallus pusillus; Mirounga leonina; Arctocephalus forsteri; Pagophilus groenlandicus; Odobenus rosmarus; Callorhinus ursinus; functional significance of sweat glands & sebaceous glands); 1966 (Mirounga leonina; skin & hair; facial vibrissae), 1970 (Marine mammals; molting & pelage of wild spp.); Ling & Button 1975 (Halichoerus grypus; skin & pelage of pups; fetal & neonatal molting); Ling & Thomas 1967 (Mirounga leonina; skin & hair; prenatal & post-natal development & molting); Mansfield 1958 (Odobenus rosmarus; biology;

Canadian Arctic); Orr et al. 1983 (Phocarctos hookeri (Neophoca hookeri); sebaceous & dermis sweat glands; morphological & histological features of integument); Riviere et al. 1977 (Phoca vitulina; relationship of thyroxine & cortisol to molt), 1978 (Phoca vitulina; molting & possible significance to exotic animal medicine); Ronald et al. 1970 (Pagophilus groenlandicus; methods of handling, molt & disease in captivity); Sokolov 1960 (Pinnipedia; skin structures, USSR); Spearman 1968 (Mirounga leonina; histological examination of epidermis during telogen stage of hair growth); Tinyakov et al. 1973 (Cetacea; patterns of skin microstructure).

MYOGLOBINS

Andres 1972 (Physeter sp.; role of heme group & histidine residues in conformation & immunochemistry of myoglobins); Atanasov 1966 (Delphinus delphis; physicochemical properties of metmyoglobin); Atanasov & Mitova 1970 (Delphinus delphis; reversibility of thermal denaturation of ferrimyoglobin derivatives); Atassi 1967 (Physeter sp.; immunochemistry of myoglobins with various modified & metalloporphyrins); Atassi & Saplin 1966 (Balaenoptera physalus; preparation; physicochemical & immunochemical characterization & differentiation from myoglobin; amino acid composition & end terminal analysis); Atassi et al. 1981 (Physeter sp.; antigenic sites), 1983 (Physeter sp.; production of monoclonal antibodies with preselected submolecular binding specificities to the 5 antigenic sites of myoglobin); Berkower et al. 1982 (Physeter sp.; immunodominant epitope recognized by murine T lymphocytes immune to different myoglobins); Berzofsky et al. 1982 (Physeter sp.; topographic antigenic determinants recognized by monoclonal antibodies to myoglobins); Blanchetot et al. 1983 (Halichoerus grypus; myoglobin gene; unusually long globin gene; hemoglobin); Blessing 1972 (Phocoena phocoena; myoglobin concentration); Blum et al. 1983 (Physeter sp.); Bolognesi et al. 1982 (Physeter sp.; reactivity of myoglobins towards imidazole, x-ray & binding study); Borisov 1981a (Physeter catodon; Balaenoptera physalus; Balaenoptera borealis; Balaenoptera acutorostrata; electrophoresis of myoglobins & hemoglobins; Antarctic); Botelho & Gurd 1978 (Cetacea (12 spp.); Pinnipedia (2 spp.); proton NMR study of histidine ionizations of myoglobins; specific assignment of individual resonances); Botelho et al. 1978 (Marine mammals; observed & computed pK values); Bradshaw et al. 1969a (Phoca vitulina; Physeter sp.; isolation & characterization of tryptic peptides of myoglobin); Bradshaw & Gurd 1969 (Phoca vitulina; Cetacea; Physeter sp.; complete amino acid sequences of seals & porpoise myoglobins); Bradshaw et al. 1969b (Phoca vitulina; Cetacea; Physeter sp.; isolation & characterization of tryptic peptides from porpoise myoglobin); Breslow & Rumen 1967 (Pinnipedia; reactivity toward hydrogen ions); Brown et al. 1983a (Physeter sp.); Castillo et al. 1977 (Orcinus orca); Chen 1967 (Physeter sp.; fluorescence of dansyl amino acids in organic solvents & protein solutions; apomyoglobin); Choon & Rodley 1983 (Physeter sp.); Colonna et al. 1978 (Physeter sp.; apomyoglobins; evolution); Crumpton 1967 (Physeter sp.; antigenic site on on myoglobin); Dedykhina et al. 1980 (Cetacea; oxidation of myoglobin & lipids in defrosted meat); Doster 1983 (Physeter sp.; scaling & protein dynamics); Flanagan et al. 1983 (Cetacea; baleen & beaked whales & dolphins); Garner et al. 1973 (Phoca vitulina; Physeter catodon; Eschrichtius gibbosus; Globicephala melaena; Phocoenoides dalli; determination of α-amino group pK; cyanate reaction application to peptides & myoglobins); Gilman 1979 (Phoca vitulina; ethyl isocyanide bound to myoglobin & hemoglobin); Glazova 1977 (Pagophilus groenlandicus; myoglobin concentrations in heart & muscle of old & young); Gol'danskii et al. 1982 (Physeter sp.; study of myoglobin structure); Goldfischer 1967 (Odobenus rosmarus; in striated muscle); Goss et al. 1982 (Cetacea; kinetics of ligand binding for diverse myoglobin & effects of substitution outside the heme cavity); Gurd et al. 1980 (Phoca vitulina; electrostatic stabilization in myoglobins; anchoring A helix); Gutman et al. 1982 (Physeter sp.; direct measurement of proton transfer as a probing for the microenvironment of the apomyoglobin heme binding); Hapner et al. 1968 (Cetacea; Physeter catodon; Phoca vitulina; comparison of myoglobins); Hartzell et al. 1968a (Phoca vitulina; Physeter sp.; reactivity of myoglobin toward hydrogen ion & cupric ion), 1968b (Phoca vitulina; Cetacea; hemic acid dissociation in myoglobins & their alkylated derivatives); Hasinoff & Christi 1982 (Physeter catodon; viscosity dependence of the kinetics of diffusion controlled reaction of carbon monoxide with myoglobins); Hasinoff & Pecht 1983 (Physeter sp.; myoglobin); Hemmingsen 1965 (Zalophus californianus; accelerated transfer of oxygen through selections of heme pigments); Herrera & Lehmann 1971 (Pinnipedia; primary structure of myoglobin); Hori et al. 1983 (Physeter sp.); Imaizumi et al. 1982 (Physeter sp.; role of heme side in oxygenation of myoglobin & hemoglobin); Infante et al. 1981 (Physeter sp.; isolation of clones with specificity for individual determination on myoglobin); Ingram & Kendrew 1956 (Pinnipedia; ESR in myoglobin & hemoglobin); Jue et al. 1983 (Physeter sp.); Kardzova et al. 1964 (Delphinus delphis; isolation & properties of myoglobin); Kendrew 1963 (Phoca vitulina; myoglobin & structure of proteins); Kendrew et al. 1954 (Phoca vitulina; porpoise; Physeter catodon; Balaenoptera musculus; Balaenoptera borealis; Balaenoptera physalus; Balaenoptera acutorostrata; spp. specifity of myoglobin); Khristova & Atanasov 1982 (Physeter sp.; oxymyoglobin oxidation in presence of Zn & Au ions); Keniry et al. 1983 (Physeter catodon; NMR study of amino acids & protein side chain mobility of methionine in crystalline amino acids & myoglobins); Korzhuev & Glazova 1967a (Cetacea; quantitative characterization of blood; hematopoietic organs; Black Sea dolphins); 1967b (Pusa caspica; concentration of muscle hemoglobin), 1967c (Pusa caspica; concentration of muscle hemoglobin); Kuzin & Maminov 1981 (Ursus arctos; morphology of blood & arterial system); La Mar et al. 1983 (Physeter sp.); Lando et al. 1982 (Physeteridae; partition of specificities between antibodies with peptides & native protein); Lando & Reichlin 1982 (Physeter sp.; characterization of antibodies preferentially reactive with peptides arising to immunization with the native protein); Lee & Oldfield 1982 (Physeter catodon; structure of heme in ferrimyoglobin & an analysis of hyperfine shifts; NMR); Lehmann 1980 (Balaenoptera acutorostrata; Megaptera novaeangliae; Ziphius

cavirostris; primary structure of major myoglobin); Lehmann et al. 1980 (Ziphius cavirostris; amino acid sequence of myoglobin); Man'kovskaya 1975 (Tursiops truncatus; myoglobin content & distribution in muscle); Marks 1970 (Phoca vitulina; kinetic studies of renaturation of series of copper (II)-denatured myoglobins), 1971 (Phoca vitulina; renaturation of copper(2)-denatured ferrimyoglobins); Matsui et al. 1975b (Stenella coeruleoalba; purification & physicochemical properties of ferrimyoglobin reductase); McLendon 1977 (Cetacea; correlation between myoglobin thermodyanmics stabilities & spp. metabolic rates); Meuth 1982 (Phocoenoides dalli; Phocoena phocoena; Orcinus orca; sequence determination of the major component myoglobins & carboxy terminal sequence studies); Meuth et al. 1981 (Orcinus orca; phylogenic relation of myoglobin); Mims et al. 1983 (Physeter sp.); Morishima & Hara 1983 (Physeter sp.); Nauman 1971 (Pinnipedia; primary structure of myoglobins); Neshumova et al. 1983 (Pusa sibirica; myoglobin distribution in muscle, oxygen blood supply); Nigen 1972 (Phoca vitulina; comparative study of myoglobin by chemical modification & 13C-NMR); Nigen & Gurd 1973 (Phoca vitulina; Physeter catodon; carboxymethylated patterns of myoglobins); Nigen et al. 1972a (Phoca vitulina; reactivity pattern and carbon-13 NMR myoglobin carboxymethylated with enriched 2-carbon-13-bromoacetate), 1973 (Phoca vitulina; carbon-13 NMR of cyanoferrimyoglobins & carboxymethylated derivatives), 1972b (Phoca vitulina; carbon-13 NMR of myoglobins carboxymethylated with enriched (2-13C) bromoacetate), 1959 (Phoca vitulina; carbon-13 NMR spectroscopy; myoglobins carboxymethylated with enriched (2-13C) bromoacetate); Poncz & Dearborn 1983 (Physeter sp.; resistance to tryptic hydrolysis of peptide bonds adjacent to N-epsilon-N-dimethyllysyl residues); Puett et al. 1973 (Pinnipedia; conformational stabilities of homologous hemoproteins of several spp.); Radola 1968 (Cetacea; myoglobin; radiation-induced hybridation of proteins); Romero-Herrera et al. 1973 (Phoca vitulina; molecular evolution of myoglobin & fossil records; a phylogenetic synthesis); Rothgeb & Gurd 1978 (Zalophus californianus; Phoca vitulina; physical methods for study of myoglobin); Rumen 1959 (Phoca vitulina; isolation of 5 myoglobins), 1960 (Phoca vitulina; amino acid composition of myoglobin 1); Rumen & Apella 1962 (Phoca vitulina; molecular association behavior of apomyoglobin 1); Ruzic et al. 1982 (Physeter catodon; ESR study on molecular oxygen adducts of apomyoglobin complexes of Co II protoporphrin IX & Co II 3,10, 17,14-tetrasulfonated phthalocyanine); Schmitz et al. 1982 (Physeter sp.), 1983 (Physeter sp.; production of monoclonal antibodies to antigenic & nonantigenic protein regions using free synthetic peptides & immunogens), 1983a (Physeter sp.), 1983b (Physeter sp.), 1983c (Physeter sp.); Scouloudi 1960 (Phoca vitulina; structure of myoglobin), 1969 (Phoca vitulina; x-ray crystallographic studies of myoglobin; molecule at 6A & 5A resolution), Scouloudi 1978 (Phoca vitulina; metmyoglobin molecules); Scouloudi & Baker 1978 (Phoca vitulina; x-ray crystallographic studies of myoglobin molecule at 2.5 angstroms resolution); Scouloudi & Prothero 1965 (Phoca vitulina; nature & configuration of mercuri-iodide ion in myoglobin derivatives); Shimizu & Matsuura 1971 (Stenella coeruleoalba; new enzyme reducing metmyoglobin in muscle); Shire et al. 1975 (Phoca vitulina; Zalophus californianus; Eschrichtius gibbosus; electrostatic effects on myoglobin application of modified Tanford-Kirkwood theory to myoglobins); Simmerman et al. 1981 (Physeter sp.; semisynthesis of myoglobin by fragment condensation); Solov'ev & Kolchanov 1982 (Physeter sp.); Sono & Dawson 1982 (Physeter catodon; formation low spin complexes of Fe III cytochrome P450-CAM with anionic ligands spin state & ligand affinity comparison to myoglobin); Srinivasan & Ravichandran 1982 (Physeter catodon; analysis of protein crystallographic structural data analysis of orientation of peptide planes); Sukhomlinov et al. 1974 (Ursus arctos; physicochemical & structural similarity & differences of carnivore myoglobins); Suzuki & Shikama 1983 (Physeter sp.); Tetaert et al. 1974 (Phoca vitulina; primary sequence of myoglobins); Theil & Theil 1971 (Phoca vitulina; myoglobin & hemoglobin), 1972 (Phoca vitulina; molecular characteristics of myoglobin & hemoglobins); Tollin 1969 (Pinnipedia; determination of orientation & position of myoglobin molecule in crystal of seal myoglobin); Traylor et al. 1983 (Physeter sp.); Troitskaya 1968 (Cetacea; tryptic & chymotryptic hydrolysates of myoglobins employing the method of peptide maps); Tsukahara & Yamamoto 1983 (Physeter sp.); Twinning et al. 1981 (Physeter sp.; time-dependence study of antibody response to myoglobins; recognition of antigenic (13) sites is unaltered over an extended period of examination); Ver Ploeg et al. 1971 (Phoca vitulina; Cetacea; Physeter sp.; mechanism & catalysis for addition of cyanide to myoglobins); Vigna et al. 1974 (Zalophus californianus; Phoca vitulina; complete covalent structure of the polypeptide chain); Wang et al. 1979 (Physeter catodon; Eschrichtius robustus; Pinnipedia; sea lion; oxygen binding of myoglobin & their Co analogs); Young & Atassi 1982 (Physeter sp.; antibodies & myoglobin evoked by free synthetic peptides of an antigenic site), 1983 (Physeter sp.); 1983a (Physeter sp.); 1983b (Physeter sp.); 1983c (Physeter sp.).

NUCLEIC ACID

Arnason et al. 1977 (Mystoceti; Odontoceti; Balaenoptera acutorostrata; B. borealis; Platanista indi; Physeter catodon; analysis of DNA); Arnason 1982 (Phocoena phocoena; Delphinapterus leucas; Balaenoptera acutorostrata; Balaena mysticetus; Lagenorhynchus albirostris; DNA); Arnason et al. 1976 (Balaenoptera acutorostrata; B. physalus; liver DNA), 1978 (B. acutorostrata; B. borealis; B. physalus; DNA), 1982 (Balaenoptera acutorostrata; Stenella frontalis; Balaena mysticetus; Delphinapterus leucas; Delphinus delphis; Physeter catodon; Platanista indi; Ziphius cavirostris; Balaenoptera borealis; Phocoena phocoena; monophylogenetic origin; DNA); Bricteux-Gregoire et al. 1975 (Balaenoptera acutorostrata; isolation of pancreatic ribonuclease, trypsinogen & 2 chymotrypsinogens); Brown et al. 1983b (Tursiops truncatus; epidermal cell proliferation; thymidine); Cheng & Parks 1972 (Phoca vitulina; nucleoside diphosphokinase isozymes in tissues); Ehresmann & Schaffer 1977 (Zalophus californianus; RNA synthesized by calicivirus-infected cells), 1979 (Zalophus californianus; calicivirus intracel-

lular RNA); Gilbert et al. 1982 (Physeter sp.; pancreatic RNAase); Ginatulina 1980a (Callorhinus ursinus; molecular structure of genome); Grillo & Sisini 1976 (Platanista indi; urea cycle enzymes in the liver; AMP deaminase, arginase, carbamyl phosphate synthetase, glutamic oxaloacetic transaminase, glutamate dehydrogenase & ornithine transaminase); Gulyas & Daniel 1969 (Pinnipedia; incorporation of labelled nucleic acid & protein precursors by diapausing & nondiapausing blastocytes); Hartles & Leaver 1955 (Physeter macrocephalus; cementum thymine; dentine pyrimidines & basic pyrimidine in teeth); Irie et al. 1966 (Balaenoptera physalus; purification & properties of pancreatic ribonuclease); Johnson et al. 1972 (Zalophus californianus; lactose synthetase in mammary glands; uridyl transferases, galactokinase, & glactosyl transferase; galactose-1-phosphate; no lactose); Kerry & Messer 1968 (Arctocephalus tasmanicus; A. forsteri; Mirounga leonina; intestinal glycosidases, uridyl transferase, UDP-glucose pyrophosphatase & other enzymes); McDermid et al. 1972 (Mirounga leonina; electrophoresis of plasma & red cell proteins & enzymes; adenylate kinase, diaphorase, other enzymes & proteins); McDermid & Bonner 1975 (Halichoerus grypus; Phoca vitulina; red cell & serum protein systems; electrophoresis of nucleoside phosphorylase, adenylate kinase, peptidase C, phosphoglucomutase & hemoglobin; hemopexin system); Mednikov & Shubina 1976 (Balaenoptera physalus; Physeter catodon; B. borealis; DNA; role of transcription promoters sites in microevolutionary processes); Mrochkov & Baidalinova 1974 (Balaenoptera borealis; B. physalus; chemical composition & food value of meat; purines); Parks et al. 1973 (Pinnipedia; purine metabolism of primitive erythrocytes; electrophoresis of AMP kinase, GMP kinase, nucleoside diphosphokinase, purine nucleoside orthophosphate ribosyl transferase & guanine phosphoribosyl transferase); Seki & Saito 1970 (Marine mammals; nucleotide comparisons in hepatic tissues of some aquatic animals); Stromberg et al. 1980 (Erignathus barbatus; Zalophus californianus; Callorhinus ursinus; growth potential of cells; SV40 early region, DNA); Suzuki et al. 1983 (Delphinus delphis; histochemical properties of myofibers in longissimius muscle; ATPase); Tamiya & Matsumoto 1979 (Callorhinus ursinus; adenosine triphosphatase; accelerated by peptide from muscle hydrolysate); Terao et al. 1970 (Cetacea; pancreatic ribonuclease ω_1); Walker et al. 1975 (Stenella plagiodon; nucleotide sequence of dolphin 5S-ribosomal ribonucleic acid); Yamagawa & Yasaka 1926 (Balaenoptera borealis; pancreatic nucleoproteins; spleen histone; nucleoprotein; nucleic acid analysis & P content); Yazawa 1933 (Cetacea; muscle purine & hypoxanthine).

NUTRITION

Ackman & Eaton 1976 (Pinnipedia; absence of pathological effects of docosenoic acids in hearts), 1977 (Pinnipedia; docosenoic acid in heart; pathological condition); Ackman et al. 1979 (Pagophilus groenlandicus; Halichoerus grypus; long-term exposure to docosenoic acids; absence of myocardial lesions), 1977 (Halichoerus grypus; dam-pup transfer of fatty acids); Amoroso et al. 1951b (Halichoerus grypus; lactation); Amoroso & Matthews 1951 (Halichoerus grypus; growth from birth to weaning), 1952a (Halichoerus grypus; growth), 1952b (Halichoerus grypus; lactation); Ashwell-Erickson & Elsner 1981a (Phoca vitulina; P. largha; energy cost of free existence in the Bering Sea); Ashwell-Erickson et al. 1979 (Phoca vitulina; P. largha; metabolism; Bering Sea), 1981 (P. vitulina richardii; P. largha; nutritional & hormonal aspects of molting; Bering Sea), 1981a (P. vitulina; P. largha; nutritional & metabolic aspects of molting); Backhouse & Hewer 1957 (Halichoerus grypus; spring behaviour); Bailey et al. 1980 (Pagophilus groenlandicus; neonatal changes in tissue levels of carbohydrate & lipid in pups; triglyceride content in pup blubber during nursing & fasting); Bentley 1963 (Megaptera nodosa; urine composition; urea, Na, K & metabolic water); Bergan & Bell 1978 (Inuit; biochemical assessment of nutritional status; Alaska); Best 1975 (Ursus maritimus; aspects of nutrition), 1976 (Pusa hispida; energetics), 1982 (Balaenoptera acutorostrata; seasonal abundance, feeding, reproduction, age & growth off Durban); Bigg 1981 (Phoca vitulina; P. largha; handbook); Blix et al. 1973a (Cystophora cristata; Pagophilus groenlandicus; feeding & health of young); Brodie 1971 (Delphinapterus leucas; growth, reproduction & behaviour; Cumberland Sound, Baffin I.), 1981 (Pinnipedia; disturbance from underwater noise); Bryden 1967 (Mirounga leonina; growth & development), 1968a (M. leonina; growth & development),1968b (M. leonina; lactation & suckling in relation to early growth), 1968c (M. leonina; growth & function of subcutaneous fat), 1969a (Pinnipedia; regulation of relative growth by functional demand; importance in animal production), 1969b (M. leonina; relative growth of major body components), 1969c (M. leonina; growth), 1971 (M. leonina; size & growth of viscera), 1972a (Marine mammals; growth & development); Bullier 1935 (Phoca vitulina; NaCl poisoning in captive), 1954 (Mirounga leonina; feeding in captivity at Parc Zoologique de Bois de Vincennes); Burns 1981 (Histriophoca fasciata; handbook), 1981a (Erignathus barbatus); Case 1978 (Pinnipedia; evolution & adaptive significance of post-natal growth); Chapskii 1965c (Pagophilus groenlandicus; initial stages in the post-natal development), 1965a (Pusa caspica; growth & onset of sexual maturity of female); Chuzhakina & Gudkov 1978 (Pusa caspica; feeding in captivity); Condy 1981a (Mirounga leonina; post-natal development & growth; Marion I., Antarctica); Cornell 1975 (Pinnipedia; feeding new born); Costa & Ortiz 1982 (Mirounga angustirostris; blood chemistry & hemostasis during prolonged fasting; serum electrolyte, enzymes, glucose, urea nitrogen, creatinine, uric acid, proteins, albumins, globulins, triglycerides, cholesterol, bilirubin, lactate dehydrogenase & alkaline phosphatase); Cowan et al. 1981 (Callorhinus ursinus; reproductive bioenergetics); Dangerfield et al. 1976 (Pinnipedia; Ursidae; lipoproteins & atherosclerosis); Depocas et al. 1971 (Phoca vitulina; sea water drinking & water flux in starved & fed seals); Dolgopolskaya 1964 (Cetacea; value of Black Sea decapods in feeding dolphins); Dyerberg & Bang 1979 (Inuit; lipid metabolism; atherogenesis & haemostasis; role of prostaglandin-3 family); Eaton et al. 1977 (Pagophilus groenlandicus; Halichoerus grypus;

docosenoic acid; heart pathology); Engelhardt 1974 (Pagophilus groenlandicus; aspects of vitamin E deprivation), 1977a (P. groenlandicus; plasma & tissue levels of dl-γ-tocopherol); Engelhardt & Geraci 1975 (Pagophilus groenlandicus; uptake & distribution of tocopherols), 1978 (P. groenlandicus; vitamin E deprivation on electrolyte & molting patterns); Engelhardt et al. 1975 (Pagophilus groenlandicus; tocopherol distribution in skeletal muscle & blubber); Fausett 1976 (Enhydra lutris; assimilation efficiency of captive); Fay 1952 (Odobenus rosmarus; field investigations), 1981 (O. rosmarus; handbook); Fetcher 1939 (Phoca vitulina; Erignathus barbatus; Pusa hispida; water balance in marine mammals); Fogg 1970 (Marine mammals; biological productivity; Antarctic); Fordyce et al. 1979 (Ziphius cavirostris; atherosclerosis & heavy metals in stranded; New Zealand); Frazer & Huggett 1973 (Cetacea; specific fetal growth rates); Frost & Lowry 1981a (Pusa caspica; P. sibirica; P. hispida; handbook); Gentry 1981a (Callorhinus ursinus; general); Geraci 1968 (Marine mammals; Otaria byronia; thiamine deficiency induced by diet in captive), 1970 (Pagophilus groenlandicus; effects of fish-induced thiamine deficiency), 1972a (P. groenlandicus; experimental thiamine deficiency; feeding of smelt & herring with added thiamine), 1974 (Halichoerus grypus; Zalophus californianus; P. groenlandicus; Phoca vitulina; thiamine deficiency; erythrocyte transketolase activity), 1975 (Pinnipedia), 1981a (P. vitulina; Callorhinus ursinus; Pusa hispida; Halichoerus grypus; Eumetopias jubata; Zalophus californianus; Pagophilus groenlandicus; dietary disorders; captivity), 1978a (Pinnipedia; nutrition & nutritional disorders); Glass et al. 1967 (Leptonychotes weddelli; fatty acid constituents of milk fats); Glass & Jenness 1971 (Mirounga angustirostris; Pagophilus groenlandicus; constituent fatty acids of milk fats); Greenwood 1979 (Monachus monachus; rearing orphans); Hall 1977 (Zalophus californianus; Phoca fasciata; Pusa hispida; Erignathus barbatus; nonlethal lavage device for sampling stomach contents); Harris et al. 1983 (Pinnipedia; Inuit; reduction of plasma lipids & lipoproteins with seal oil high in 20:5ω3 & 22:6ω3); Harrison & Kooyman 1968 (Pinnipedia; general physiology); Harrison et al. 1962 (Phoca vitulina; growth & structure of thyroid gland); Hashimoto & Dayton 1964 (Orcinus orca; lipids from coronary & aortic atheromata); Hashimoto et al. 1967a (Orcinus orca; Globicephala melaena; Physeter macrocephalus; aliphatic wax alcohols & other lipids in atheromata & aortic tissues; plasma lipids, lipoproteins, wax esters & sterol esters); Heu 1977 (Pagophilus groenlandicus; Histriophoca fasciata; Pusa sibirica; P. caspica; P. hispida; Phoca vitulina; Halichoerus grypus; Erignathus barbatus; Cystophora cristata); Hiatt & Hiatt 1942 (Phoca vitulina; effect of food on glomerular filtration & renal blood flow); Higashi et al. 1960 (Cetacea; Balaenoptera physalus; Pinnipedia; fur seal; fatty acid composition content of vitamins A, A_1, A_2 & B_6 in livers of pregnant & non-pregnant); Hochachka et al. 1979 (Leptonychotes weddelli; unusual maternal-fetal blood glucose concentrations in resting & fasting); Hoppner et al. 1978 (Inuit; nutrient & levels of some foods; Arctic Bay, N.W.T.); Hoygaard 1940 (Inuit; studies on nutrition & physio-pathology); Innes 1981 (Pagophilus groenlandicus; growth in N.W. Atlantic); Jessee 1968 (Pinnipedia; atherosclerosis); Johansen 1934 (Pusa caspica); Johansen et al. 1969 (Marine mammals; nutritional & health requirements of development & maintenance of conventional colonies); Keith et al. 1979 (Mirounga angustirostris; metabolism & recycling of glucose), 1980 (M. angustirostris; intermediary metabolism & bioenergetics), 1981 (M. angustirostris; kinetic model of fasting metabolism); Keiver & Ronald 1981 (Pagophilus groenlandicus; digestible energy); Keyes 1968 (Pinnipedia); Kolesnik & Timofeema 1980 (Callorhinus ursinus; growth, nutrition & production; Tyuleny I., USSR); Kooyman 1981 (Hydrurga leptonyx; handbook), 1981b (Lobodon carcinophagus; handbook); Krylov 1965 (Odobenus rosmarus; determination of age, rate of growth & analysed age structure of Pacific catch); Laws 1953 (Mirounga leonina; growth & age), 1956 (Marine mammals; growth & sexual maturity); Le Boeuf & Ortiz 1977 (Mirounga angustirostris; composition of milk); Ling & Thomas 1967 (Mirounga leonina; prenatal & early post-natal development & molting); Lluch Belda 1970 (Zalophus californianus; growth & mortality); Lockyer 1975 (Physeter catodon; estimates of growth & energy budgets), 1976a (Cetacea; baleens; growth & energy budgets), 1978 (Balaenoptera borealis; B. physalus; theoretical approach to growth & energy balance, to female reproduction), 1977 (B. borealis; estimate of growth), 1981 (Cetacea; baleen whales; growth & energy budgets; S. hemisphere); Lyall-Watson 1962 (Odobenus rosmarus; Zalophus californianus; Arctocephalus pusillus; Phoca vitulina; Mirounga angustirostris; animal milk analyses & hand-rearing techniques); Mansfield 1959 (Odobenus rosmarus; growth, Canadian Arctic), 1966a (O. rosmarus; growth, Canadian Arctic), 1966b (O. rosmarus; growth, Canadian Arctic), 1977 (Halichoerus grypus; growth & longevity; E. Canada); Manton 1976 (Cetacea; nutrition of dolphins); Marine Mammal Biological Laboratory 1970 (Pinnipedia; fur seals; pup nutrition); Mathisen et al. 1962 (Eumetopias jubata; breeding habits, growth & stomach contents); McCann 1983 (Mirounga leonina; activity budgets during breeding season); McLaren 1958b (Erignathus barbatus; growth & reproduction); Miyazaki 1977 (Stenella coeruleoalba; growth & reproduction; Pacific coast of Japan); Nachtigall 1975 (Tursiops truncatus; food deprivation & work rate); Naudet et al. 1977 (Pinnipedia; symposium on nutritional aspects); Ohata et al. 1977 (Callorhinus ursinus; metabolism); Olenchenko 1972a (Pusa caspica; growth dynamics of water volume & mineral content of tissues & organs), 1972b (P. caspica; change in volume of albumin & irreplaceable amino acids in process of growth & development); Oritsland 1977 (Pinnipedia; model of energy balance); Ortiz et al. 1978 (Mirounga angustirostris; water & energy flux in pups fasting under natural conditions), 1981 (M. angustirostris; milk intake index of parental investment); Otten & Andrews 1976 (Zalophus californianus; captivity); Panina 1966b (Pinnipedia; sea lions & seals; Kurile I.), 1970 (Callorhinus ursinus; Commander I.), 1971 (C. ursinus; food habits & food resources; Sea of Japan), 1972 (C. ursinus; fattening as indicator of well-fed in pelagic period of life); Parsons et al. 1981 (Pusa hispida; minimal energy requirements of captive);

Pastukhov 1969 (Pusa sibirica), 1971 (P. sibirica; feeding under experimental conditions); Pastukhov & Kangas 1971 (Marine mammals; pasteurization of whole fish ration for captive); Payne 1977 (Pinnipedia; fur seal; growth & population), 1979 (Arctocephalus gazella; growth); Percy 1977 (Pusa hispida; effects of oil); Perez & Mooney 1981 (Callorhinus ursinus; reproduction, energetics & food consumption during lactation); Pernia et al. 1979 (Mirounga angustirostris; protein catabolism during prolonged fasting), 1980 (M. angustirostris; urea turnover during prolonged fasting), 1981 (M. angustirostris; glomerular filtration rate in fasting weaned pups); Pitcher 1977 (Phoca vitulina; growth; Prince William Sound & Copper River delta area); Ray & Schevill 1974 (Eschrichtius robustus; feeding of captive); Reiter et al. 1978 (Mirounga angustirostris; transition from weaning to nutritional independence); Rigdon & Drager 1955 (Zalophus californianus; thiamine deficiency by feeding frozen fish); Ridgway & Harrison 1981a (Pinnipedia; Phocidae: handbook); Roberts et al. 1964 (Cetacea; atherosclerosis), 1965 (Cetacea; spontaneous atherosclerosis in Pacific toothed & baleen whales), 1963 (Cetacea; arteriosclerosis); Robison & Craddock 1983 (Lagenodelphis hosei; stomach content & nutritional value; prey size selection); Schmidt et al. 1971 (Callorhinus ursinus; lactose synthetase activity in milk); Schroeder 1933 (Odobenus rosmarus; hypersensitivity to cows' milk protein); Sergeant 1973a (Pagophilus groenlandicus; feeding, growth & productivity; N.W. Atlantic); Sergeant et al. 1973 (Tursiops truncatus; age, growth & maturity; N.E. Florida); Shaughnessy 1974a (Mirounga leonina; electrophoretic study of blood & milk proteins); Sidwell 1981 (Cetacea; chemical & nutritional composition); Sinclair 1981 (Inuit; Pinnipedia; relative importance of linoleic & linolenic acid families studies in Inuit diet); Skinder 1979 (Phoca vitulina; captivity); Spotte & Adams 1979 (Callorhinus ursinus; food intake & cycles); Spotte & Stake 1982 (Halichoerus grypus; hand-rearing of twins from birth to weaning); Stake & Spotte 1982 (Halichoerus grypus; estimate of the maintenance energy requirement from birth to weaning); Stewart & Lavigne 1980 (Pagophilus groenlandicus; neonatal growth; N.W. Atlantic), 1981a (Pagophilus groenlandicus; energetics of nursing; energy transfer & female condition); Stout 1969 (Pinnipedia; atherosclerosis); Stromberg et al. 1980 (Zalophus californianus; Callorhinus ursinus; Erignathus barbatus; growth potential of cells; SV40 early region DNA); Thomas & De Master 1983 (Leptonychotes weddelli; parameters affecting survival of pups to weaning); Tomilin 1946 (Cetacea; lactation); White 1970 (Tursiops truncatus; thiamine deficiency induced by raw fish diet); Williams 1981 (Tursiops truncatus; dietary deficiencies in captive, 20:4ω6, prostaglandins; phosphatidylcholine in liver & muscle); Wilson & Osbourn 1960 (Marine mammals; compensatory growth after undernutrition); Wo 1973 (Inuit; nutritional status in relation to fatty acids, vitamin A & E); Wo & Draper 1973 (Inuit; plasma vitamin E levels; N. Alaska); Worthy 1981 (Pagophilus groenlandicus; changes in energy stores during neonatal development), 1981a (Pagophilus groenlandicus; body size & composition during the post-weaning period); Worthy & Lavigne 1981a (Pagophilus groenlandicus; post-weaning growth), 1981b (Pagophilus groenlandicus; changes in blood properties after weaning of fasting & feeding pups), 1983 (P. groenlandicus; energetics of fasting & subsequent growth of weaned pups); Worthy et al. In Press (Pagophilus groenlandicus; post-weaning growth); Yone & Tomiyama 1953 (Cetacea; extraction & potency of antianemic factor).

PRODUCTS

Abe et al. 1968 (Cetacea; anticoagulant activity of intestine heparin & its clinical application); Abegglen et al. 1963 (Marine mammals; technology); Akiya et al. 1950 (Physeter sp.; nutritive value of mixed fatty acid ethyl esters of spermaceti oil); Allden et al. 1954 (Cetacea; condensed-solubles in pig & poultry feed); Baltes 1968 (Cetacea; meat extract composition; water, PO_4, total N & amino acids); Botta et al. 1980 (Pagophilus groenlandicus; sensory quality of frozen, stored, salted & smoked meat), 1982 (Pagophilus groenlandicus; sex, age & carcass cut on composition of meat), 1982a (Pagophilus groenlandicus; composition of meat; molting); Brandt 1940 (Cetacea; economic analysis; oil; hormones & vitamin A in various tissues); Brierem 1949 (Cetacea; meal on dairy cows & milk; Norway); Brocklesby & Denstedt 1933 (Pinnipedia; industrial chemistry of oil; British Columbia, Canada); Brocklesby 1941 (Pagophilus groenlandicus; Phoca vitulina; Eumetopias jubata; chemistry & technology of oils); Brown & Rawlins 1926 (Cetacea; feeding of oil on depot fat of rats); Bryden 1970 (Mirounga leonina; utilization of meat); Budantseva 1973 (Physeter sp.; preparation containing oil on regeneration of chronic gastric ulcer), 1980 (Physeter sp.; spermaceti oil on rat enzyme activities); Bukin & Skorobogalova 1951 (Physeter sp.; liver, a source of vitamin A); Carpenter et al. 1955 (Cetacea; feed for chicks); Celliers 1961 (Cetacea; chemical composition of South African products; proximate & mineral); Chang et al. 1972 (Cetacea; stomach gastrone preparation inhibits acid secretion in peptic ulcers); Cleland & Southcott 1969 (Erignathus barbatus; Neophoca cinerea; Hydrurga leptonyx; Arctocephalus pusillus; illness from eating liver; Australian waters); Cockrill 1951 (Cetacea; meat); Combs et al. 1954 (Cetacea; growth factor in solubles used in chick feeds); Dammers 1952 (Cetacea; condensed-solubles as pig feed); Dean 1947a (Cetacea; use of dolphin oil; physical constants), 1947b (Pinnipedia; physical & chemical properties of oil; use); Dedyukhina et al. 1979 (Cetacea; characteristics of intramuscular lipids of meats), 1980 (Cetacea; oxidation of myoglobin & lipids in defrosted meat); De Heus & De Man 1951 (Cetacea; vitamin B_{12} content in condensed-solubles); de Iongh et al. 1965 (Cetacea; oil on serum lipids of man); Donaldson & Foster 1939 (Pinnipedia; meal in diet of chinook salmon, Onchorhynchus tschawytscha); Dugal & Riou 1947a (Pinnipedia; purification of oil; nutritive value of oil; Canada), 1947b (Pinnipedia; nutritive value of oil; Canada); Egorova 1964 (Balaenoptera physalus; Physeter catodon; vitamin A & kitol content alterations in liver during storage), 1968 (Physeter catodon; Balaenoptera physalus; vitamin A level change in liver during preservation with γ-irridiation);

Fangauf & Deditius 1934 (Cetacea; meal); Fladmark 1951 (Cetacea; oil & food products); Foll 1953 (Cetacea; nutritive value of meals); Ford 1964 (Cetacea; available amino acids in meat); Friend & Crampton 1961 (Cetacea; liver on breeding performance of female mink; hypervitaminosis A); Fujii et al. 1954b (Cetacea; nutritional value of hydrogenated oil), 1956 (Cetacea; nutritive value of glycerides & methyl esters); Fujii & Okura 1956a (Physeter sp.; oil caused seborrhea), 1956b (Cetacea; nutritive value of hydrogenated oil with added essential fatty acids); Garton et al. 1952 (Cetacea; dietary oil on depot fats of pigs); Godfrey 1977 (Cetacea; meal & solubles in diets of pigs & accumulation of Hg in their carcasses); Golding & Morris 1926 (Cetacea; meat products as pig food); Gray et al. 1951a (Cetacea; essential amino acids; minerals (Ca, P) & vitamins (riboflavin, nicotinic acid, pantothenic acid & pyroxidine) in water-soluble solids); 1951b (Balaenoptera physalus; Balaenoptera borealis; Physeter catodon; Megaptera nodosa; whale liver extracts; S, P, Na, Cu, Mg, Fe, Al, Cl & B vitamins); Green & Singleton 1954 (Cetacea; liver vitamin A determination); Guttman 1955 (Cetacea; enzymic liver hydrolyzate; Ca, P, Cu, Fe, Co, F, N, choline, thiamine, riboflavin, folic acid, niacin, pantothenic acid & vitamin B_{12}); Halnan 1942 (Cetacea; meat in chick diets); Hayashi et al. 1966 (Callorhinus ursinus; vasoactive polypeptide from muscles; clinical applications), 1968 (Eumetopias jubata; Callorhinus ursinus; Arctocephalus pusillus; vasodilating peptide); Heggenhaugen 1932 (Cetacea; meat; notes on whale anatomy; food for fur bearers); Hewitt 1954 (Cetacea; solubles as pig feeds & their proximate composition), 1957 (Cetacea; meat as pig feed); Higashi et al. 1950 (Balaenoptera physalus; nutritive value of oil & hardened or polymerized oil); Hope et al. 1954 (Cetacea; meal & solubles in pig diets); Hussein et al. 1982 (Delphinus delphis; production of pancreatin); Iguchi 1953 (Physeter sp.; industrial use of oil in Japan); Kabalvanski 1955 (Cetacea; correct rise of fat, meat & skin in dolphin; vitamin A & D_3 in fat; iodine No. & saponification No. of oil); Kakinuma et al. 1950/1951 (Balaenoptera physalus; Physeter catodon; nutritional studies of edible oils & fats); Kharkov 1931 (Pinnipedia; ako oil melting plant); Kieckebusch et al. 1960 (Cetacea; biological values & amino acid composition of meat); Kirsch & Jantzen 1941 (Cetacea; meal); Kizevetter 1950 (Histriophoca fasciata; Erignathus barbatus; Pusa hispida; technical & chemical characteristics of pinnipeds; E. USSR); Kolchev & Chernomorski 1939 (Pinnipedia; extracting oil from fat by the cold method); Kolchev & Marieva 1953 (Physeter sp.; technochemical composition of blubber & its changes at rendering); Kondo & Narita 1959 (Cetacea; nutrients of brain); Krutchenskii 1973 (Cetacea; protein-vitamin concentrate); Kyte 1956 (Eumetopias jubata; processing & proximate composition; glycogen); Lantz & Gunasekera 1956 (Delphinus delphis; commercial utilization; proximate composition of edible parts, blubber, skin, bone, tail, fin, liver, intestine, head & other viscera); Lassen et al. 1951 (Cetacea; condensed-solubles in poultry feed; amino acid composition); Legendre 1947 (Pinnipedia; rending of oil); Lygonis 1966 (Globicephala melaena; dietary fat on serum cholesterol levels); Lynch et al. 1970 (Cetacea; use meat & bone meal in rat diet); Majima 1963 (Cetacea; effect of polyunsaturated fatty acids in oil on experimental hypercholesteremia of rats); Malmbros & Wigand 1957 (Cetacea; effect of oil on serum cholesterol of man); Marnov & Kolosova 1966 (Cetacea; amino acid composition of meal); Maruyama 1965a (Cetacea; products as food); Matsumura 1950/1951 (Balaenoptera physalus; effect of continued intake of fat on human body); Matsuura et al. 1952 (Cetacea; methionine content in muscle proteins); Mayfield et al. 1955 (Cetacea; vitamins in eggs from chickens fed dried solubles); McDonald 1953 (Cetacea; condensed meat meal in chicken rations); McDonald & McClymont 1954 (Cetacea; condensed-solubles in chicken ration; nutritional value); McLaren 1957 (Pinnipedia; products of carcasses & loss of seals; Arctic); Merino 1953 (Cetacea; composition & food value of meat), 1954 (Cetacea; composition & nutritive value of meat); Miller & Carpenter 1964 (Cetacea; amino acid composition & nitrogen balanced studies with rat); Miller et al. 1965 (Cetacea; availability of methionine in meal); Milne 1955 (Cetacea; condensed-solubles in chick starter feed); Miyagawa & Ueno 1958 (Marine mammals; B vitamins of liver meal & liver extract); Morshtyn 1963b (Pagophilus groenlandicus; technology of oil production from fat), 1969 (P. groenlandicus; technology of fat production); Mrochkov & Kiselev 1972 (Physeter sp.; chemical composition of parts of body; Antartic); Mrochkov & Baidalinova 1974 (Balaenoptera borealis; Balaenoptera physalus; chemical composition & food value of meat); Nakai et al. 1963 (Balaenoptera physalus; nitrogenous compounds in muscle extracts); Nakashima & Tanaka 1966a (Cetacea; chondroitin sulfate production from nasal cartilage), 1966b (Cetacea; chondroitin sulfate production from nasal cartilage); Ogata 1951/52 (Cetacea; methionine content of protein of some Japanese food); Ogawa et al. 1958 (Cetacea; amino acid composition of meat); Ohi et al. 1980 (Physeter catodon; CH_3Hg & protection of meat against CH_3Hg neurotoxicity; its relationship with organ distribution of Hg & Se in rat); Okada et al. 1953a (Cetacea; glutathione determination by polarography); Olenchenko & Magomaev 1974 (Pusa caspica; production of feed meal from carcasses); Oseki 1934 (Balaenoptera physalus; Balaenoptera borealis; nutritive value of liver; vitamin A & E content); Osipov 1931 (Pusa caspica; industrial fat); Pihl 1952 (Cetacea; cholesterol content of products); Pocchiari et al. 1982 (Cetacea; presence of balenine in meat extract); Popov et al. 1976 (Orcinus orca; amino acid composition of meat; source of high quality meat); Pritchard & Cawthorne 1955 (Cetacea; composition of meat meals of various grades; albumin, riboflavin, niacin, pantothenate, pyroxidine, inositol & vitamin B_{12}); Pritchard & Smith 1960 (Cetacea; composition & amino acid content of meal); Pritchard & Wraige 1952 (Cetacea; value of liver meal & meat meal as sources of vitamin B complex in rations of farm animals); Rankov & Iovchev 1955 (Delphinus delphis; vitamin A content of oil under different rendering conditions); Riou 1947a (Pinnipedia; chemical & physical characteristics of oil), 1947b (Pinnipedia; residue after rendering); Rudolph 1949 (Cetacea; utilization of marine raw materials); Sergeev 1962 (Cetacea; enrichment of oil with vitamin D); Shibata 1951 (Physeter sp.; distribution of nitrogenous compounds in toko-meat); Sidwell 1981 (Cetacea; chemical & nutritional

composition); Spencer & Kleiman 1978 (Physeter sp.; detection of spermaceti cream); Tanaka & Hata 1950 (Cetacea; freezing meat with layers of different heat conductivity on its surfaces); Taverner 1975 (Cetacea; meal & solubles in pig feed & Hg accumulation in pig tissues); Titova 1958 (Cetacea; digestibility of meat by foxes); Todd 1963 (Cetacea; Queensland meal as protein supplement in pig feed); Toyomizu et al. 1963 (Cetacea; dietary oil on fatty acid composition of rainbow trout); Wahnon 1956 (Cetacea; uses of head oil); Waldern 1963 (Cetacea; solubles as protein supplement beef calf rations); Watanabe & Suzuki 1950a (Physeter sp.; chemical composition of various body parts), 1950b (Cetacea; chemical composition of various body parts); Waterworth 1964 (Cetacea; nutritive quality of available amino acid composition of some protein concentrates); Wheeler 1929 (Balaenoptera borealis; Balaenoptera physalus; changes in condition of blubber); Williams & Natoli 1972 (Cetacea; solubles in pig feeds); Woodman & Evans 1948 (Cetacea; composition & nutritive value to pigs of meal); Yone & Tomiyama 1953 (Cetacea; extraction of antianemic factor from liver; potency estimation); Yoshida et al. 1965 (Physeteridae; nutritive value of fatty acids to poultry).

PROTEINS

Adams & Osburn 1973 (Mirounga angustirostris; electrophoresis of serum proteins in pup & female adult); Allden et al. 1954 (Cetacea; condensed-solubles for hog & poultry feed); Ando et al. 1979 (Ursus arctos yesoensis; general composition & chemical properties of main components in milk; total protein; casein & whey proteins); Augusteyn et al. 1972 (Mirounga leonina; structure of cytochrome C); Baker et al. 1967 (Ursus maritimus; electrophoresis of milk protein fractions); Bang & Dyerberg 1972 (Inuit; plasma lipids & lipoproteins; W. Greenland); Bang et al. 1971 (Inuit; plasma lipid & lipoprotein patterns; W. Greenland), 1980 (Inuit; composition of food; N.W. Greenland); Baslow 1965 (Marine mammal; neurosine (N-acetyl-L-histidine; identification & distribution); Beal & Cardeilhac 1979 (Globicephala scammoni; ceruloplasmin); Bennich et al. 1957 (Cetacea; enzymic hydrolysis of casein; amino acid composition & carbohydrate content); Bentley 1963 (Megaptera nodosa; composition of urine during fasting); Bjornhag et al. 1979 (Pinnipedia; Cetacea; postnatal growth & milk composition correlation; protein, fat & lactose); Blix 1971 (Pinnipedia; creatine in divers); Blumberg et al. 1960 (Callorhinus ursinus; haptoglobin, hemoglobins & serum proteins); Blumenkrantz & Asboe-Hansen 1978 (Pinnipedia; hydroxyproline to hydroxylysine molar ratio indicate collagen type); Bock et al. 1968 (Halichoerus grypus; Phocoena phocoena; amino acid composition of milk); Bogdonov et al. 1977 (Callorhinus ursinus; biochemical polymorphism of transferrin, alkaline phosphatase, haptoglobins and plasma & erythrocyte esterases); Border 1975 (Globicephala scammoni; Lagenorhynchus obliquidens; Orcinus orca; Tursiops truncatus; electrophoresis of hemoglobins); Borisov 1966a (Pagophilus groenlandicus; serological analysis of colonies), 1969a (Cetacea; comparative analysis of serum albumin), 1969b (Ursus arctos; Ursus maritimus; Histriophoca fasciata; Pusa hispida; Cystophora cristata; Odobenus rosmarus; Physeter catodon; Balaenoptera musculus; Balaenoptera physalus; antigenic properties of serum proteins), 1969c (Cetacea; serological analysis), 1981a (Physeter catodon; Balaenoptera physalus; Balaenoptera borealis; Balaenoptera acutorostrata; electrophoretic analysis of hemoglobins & myoglobins), 1981b (Balaenoptera acutorostrata; Balaenoptera borealis; Physeter macrocephalus; isozymes of lactate dehydrogenase of blood plasma, corpus luteum, corpus albicans & testes), 1981c (Balaenoptera borealis; Balaenoptera acutorostrata; haptoglobin electrophoresis); Brown 1976 (Marine mammals; evolution of serum albumins); Brown & Mayhall 1977 (Balaenoptera borealis; Tursiops truncatus; Zalophus californianus; urea formation in liver; ornithine-urea cycle; ornithine carbamyl transferase activity); Cavagnolo & Vedros 1978 (Callorhinus ursinus; identification & characterization of immunoglobulin classes of serum & throat mucus), 1978a (Callorhinus ursinus; immunoglobulin levels), 1979 (Callorhinus ursinus; serum & colostrum immunoglobulin levels IgG, IgM & IgA); Chalmers et al. 1970 (Marine mammals; distribution of glutamic acid decarboxylase in brain); Colonna et al. 1978 (Physeter catodon; evolution of homologous proteins); Cornell 1983 (Orcinus orca; hematology & clinical chemistry; serum LDH, urea, creatinine, glucose & hemoglobin concentrations); Costa 1982 (Enhydra lutris; energy, nitrogen & electrolyte & sea water drinking); Costa & Ortiz 1982 (Mirounga angustirostris; blood chemistry hemostasis during prolonged fasting; urea N, creatinine, uric acid, protein, albumin & globulin); D'Angelo 1982 (Delphinapterus leucas; erythrocyte glucose transport system; protein permeability); Dangerfield et al. 1976 (Pinnipedia; Ursus sp.; lipoproteins & atherosclerosis; electrophoresis); Daniel 1971a (Callorhinus ursinus; growth of preimplantation embryo & its correlation with changes in uterine protein); De Jong & Goodman 1982 (Cetacea; Pinnipedia; mammalian phylogeny studied by sequence analysis of eye lens proteins; α-crystallin); Delcourt 1969 (Marine mammals; electrophoresis of lipoproteins); de Monte & Pilleri 1968a (Delphinidae; Delphinus delphis; hemoglobin & plasma protein fractions, microelectrophoresis), 1968b (Delphinidae; Delphinus delphis; electrophoretic mobility of hemoglobin & on plasma protein fractions); Dosaka et al. 1983 (Callorhinus ursinus; protein); Doster 1983 (Physeter sp.; protein scaling & protein; myoglobin); Ford 1964 (Cetacea; available amino acids in meat); Gallien et al. 1967 (Delphinus delphis; electrophoresis of serum proteins; prealbumin, albumin, transferrin & globulins; 21 fractions), 1970 (Delphinus delphis; Stenella styx; Grampus griseus; Globicephala melaena; immunoelectrophoresis of serum proteins & transferrin; 21 constituents); Gentry 1981 (Eumetopias jubata; Zalophus californianus; Callorhinus ursinus; Arctocephalus forsteri; sea water drinking & nitrogen excretion during fasting); Geraci & Gerstmann 1966 (Cetacea; dolphin; relation of dietary histamine to gastric ulcers); Geraci et al. 1969 (Delphinapterus leucas; Tursiops truncatus; serum constituents; urea, creatinine, uric acid, globulin, albumin, glutamic oxaloacetic transaminase, glutamic pyruvic transaminase, lactic acid, Na, Cl, Ca & P); Geraci & St. Aubin 1979 (Tursiops truncatus; Delphinapterus leucas; Phocoena phocoena; tissue sources & diagnostic value of circulating enzy-

mes; liver, muscle & plasma alanine aminotransferase, aspartate aminotransferase, sorbitol dehydrogenase, γ-glutamyl transferase, alkaline phosphatase & creatine kinase); Geraci et al. 1979 (Pusa hispida; age, condition, sampling time & method on plasma chemical constituents on free-ranging seals; BUN, uric acid, aspartate aminotransferase, glucose, bilirubin, cholesterol, triglycerides, glucose, alkaline phosphatase, Na, Cl, Ca & PO_4); Gitlin & Boesman 1967 (Marine mammals; fetal animal-specific serum proteins); Glazova 1977 (Pagophilus groenlandicus; physiological & biochemical blood indices of young & adults; electrophoresis of serum proteins (5-8 fractions) & myoglobin in heart & muscle; hemoglobin content); Gray et al. 1951a (Cetacea; essential amino acids, Ca, P, riboflavin, nicotinic acid, pantothenic acid & pyridoxine in water-soluble solids); Gregory et al. 1955 (Balaenoptera sibbaldi; Balaenoptera musculus; composition of milk; total solid, fat-free solid, total protein, casein, soluble proteins, lactose, minerals, vitamins & fat content); Grillo & Sisini 1976 (Platanista indi; urea cycle enzymes in the liver; carbamyl phosphate synthetase, arginase, AMP deaminase, glutamic oxaloacetic transaminase, glutamate dehydrogenase & ornithine transaminase); Guarino et al. 1975 (Pinnipedia; distribution, plasma protein binding & biliary excretion of Camptothecin NSC-100880); Gulyas & Daniel 1969 (Pinnipedia; incorporation of labelled nucleic acid & protein precursors by diapausing & nondiapausing blastocytes); Guy et al. 1976 (Mirounga sp.; activation peptide of trypsinogen); Halloran & Pearson 1972 (Ursus arctos; blood chemistry; creatinine, uric acid, urea, P, Ca, Na, K, Cl & glucose; S.W. Yukon); Harris & Milne 1981 (Physeter catodon; balenine (β-methyl-N-methylhistidine), carnosine & anserine); Hashimoto & Ludowieg 1968 (Cetacea; protein polysaccharides from the nucleus pulposus of intervertebral disks); Hasnain 1978 (Balaenoptera borealis; actomysin susceptible to trypsin); Hay & Watson 1976 (Marine mammals; plasma transport proteins of 25-hydroxycholecalciferol); Hayashi & Suzuki 1967 (Callorhinus ursinus; new biological active peptide in muscle); Heath 1978 (Halichoerus grypus; serum protein analysis); Hippe et al. 1977 (Cetacea; cobalmin-binding proteins of stomach & serum of porpoise binding capacities & molecular sizes); Hochachka et al. 1975 (Phoca vitulina; Zalophus californianus; multiple end-products of anaerobiosis; amino acid to succinate); Holmquist et al. 1976 (Phoca vitulina; Zalophus californianus; evolution of globulin family of genes; maximum parsimony genetic distances from α-hemoglobulin & myoglobin phylogenies); Howell 1930 (Monodon monoceros; myology; subdermal oil reserves); Hunter & Madin 1976 (Callorhinus ursinus; Mirounga angustirostris; clinical blood values; serum cholesterol, globulins, total protein, BUN & bilirubin), 1978 (Callorhinus ursinus; clinical blood values; stored frozen vs fresh serum; total protein, globulin, creatinine, P, cholesterol & bilirubin); Ishihara 1960 (Balaenoptera musculus; Balaenoptera borealis; Balaenoptera physalus; Balaenoptera acutorostrata; Physeter catodon; stomach mucosa pepsin; crystalline); Ishikawa 1949 (Physeter sp.; pancreatic proteolytic enzyme activity); Jackson et al. 1979 (Marine mammal; urinary nitrogen distribution; Carnivora); Jenness & Odell 1978 (Kogia breviceps; composition of milk; protein & casein electrophoresis; whey proteins, citrate, lipid, fatty acids & lactose); Kaduce et al. 1981 (Ursus maritimus; characterization of plasma lipids & lipoproteins); Kaegi et al. 1980 (Pinnipedia; metallothionein metal thiolate protein); Kasai 1982 (Cetacea; isolation & characterization of antigenic fragments of proteoglycan core protein); Kato & Shimada 1970 (Cetacea; Delphinus sp.; isolation & properties of spleen ferritin); Kawamura et al. 1976 (Balaenoptera borealis; amino acid composition of α-, β- & γ-keratose; water; ash); Keyes et al. 1971a (Callorhinus ursinus; analysis of urine); Kleckebusch et al. 1960 (Cetacea; biological value of meat; amino acid composition); Kimura et al. 1981 (Balaenoptera borealis; electrophoretic analysis of connectin in muscle); Klemm et al. 1976 (Pinnipedia; amino acid sequence of seal pepsinogen); Kobayashi & Kabeno 1969 (Cetacea; antiulcerous mucoproteins from digestine system); Koide & Matsuoka 1969 (Balaenoptera physalus; purification of pancreatic proteases; anionic chymotrypsin), 1970 (Balaenoptera physalus; properties of purified pancreatic anionic chymotrypsin), 1971a (Balaenoptera physalus; properties of purified pancreatic cationic trypsin), 1971b (Balaenoptera physalus; properties of purified pancreatic cationic chymotrypsin); Korzhuev 1952 (Marine mammals; forms of localizations & quantity of hemoglobin of different animals); Kubota et al. 1967 (Tursiops truncatus; physicochemical properties of pepsin-solubilized collagens from hide); Kupke et al. 1979 (Marine mammals; differences in lipid & lipoprotein concentrations of capillary & venous blood); Kusakabe et al. 1962 (Balaenoptera physalus; Physeter catodon; Balaenoptera borealis; anserine, carnosine, creatine & amino acid content); Lauer & Baker 1972 (Marine mammals; case in electrophoresis), 1977 (Ursus maritimus; Pagophilus groenlandicus; amino acid composition of casein); Lee et al. 1977 (Ursus maritimus; blood values; total protein, glutamic pyruvic transaminase, glutamic oxaloacetic transaminase, BUN, minerals, cholesterol & other hematological values); Lee et al. 1977a (Zalophus californianus; metallothionein & subcellular localization of Hg & Cd in liver & kidney; nuclear fraction); Lewis 1964 (Marine mammals; plasma proteins); Lundberg et al. 1976 (Ursus americanus; protein metabolism before & after hibernation); Magomaev & Olenchenko 1969 (Pusa caspica; free amino acid & amino acid composition of meat); Manski et al. 1964 (Cetacea; immunochemical analysis of the phylogeny of lens proteins); Margni et al. 1971 (Lyptonychotes weddelli; seroproteins, glycoproteins, lipoproteins & immunoglobulins), 1972 (Lyptonychotes weddelli; serum protein, glycoproteins & lipoproteins); Marnov & Kosolova 1966 (Cetacea; amino acid composition of meal); Matsumoto 1980 (Physeter catodon; dentrifice containing ATPase activating polypeptides); Matsumoto et al. 1976 (Callorhinus ursinus; muscle hydrolysate peptides with vasoactive & vasodilating function); Matsuura et al. 1952 (Cetacea; methionine content of muscle proteins); McDermid et al. 1972 (Mirounga leonina; electrophoresis of plasma & red cell proteins & enzymes; phosphoglucomutase, acid phosphatase, phosphohexose isomerase, albumin, prealbumin, 6-phosphogluconate dehydrogenase, lactate dehydrogenase, adenylate kinase, peptidases, diaphorase, esterases, alkaline phosphatase, hemoglobin, ceruloplasmin, haptoglobins & trans-

ferrin); McDermid & Bonner 1975 (Halichoerus grypus; Phoca vitulina; electrophoresis of red cell & serum proteins & enzymes; hemoglobin, peptidase C, phosphoglucomutase, nucleoside phosphorylase & adenylate kinase; hemopexin system); Medway 1979 (Tursiops truncatus; bisalbuminemia in females); Medway & Geraci 1965 (Tursiops truncatus; blood chemistry; whole blood, plasma & serum Na, Cl, albumin, BUN, α_1-, α_2- & β-globulins); Medway et al. 1970b (Langenorhynchus obliquidens; Tursiops truncatus; halothane anaesthesia on serum total protein, bilirubin, alkaline phosphatase, ornithine carbamyltransferase & glutamic oxaloacetic transaminase); Miller & Carpenter 1964 (Cetacea; amino acid composition of meat; nitrogen balance studies with rats); Miller et al. 1965 (Cetacea; availability of methionine in meat); Morii 1979c (Stenella coeruleoalba; amino acids & ammonia from stomach fluid), 1981 (Stenella coeruleoalba; blood proteins); Mrochkov & Baidalenova 1974 (Balaenoptera borealis; Balaenoptera physalus; chemical composition & nutritic value of meat; amino acid composition; anserine, carnosine); Murphy et al. 1982 (Lyptonychotes weddelli; free amino acids in blood of unborn & mothers during resting & diving); Murphy & Hochachka 1981a (Leptonychotes weddelli; free amino acid profiles in blood during diving & recovery); Naevdal 1965 (Pagophilus groenlandicus; protein polymorphism used for identification of populations), 1966 (Pagophilus groenlandicus; Cystophora cristata; Pusa hispida; Erignathus barbatus; hemoglobins & serum proteins; electrophoresis), 1968 (P. groenlandicus; blood protein polymorphism; E. Canada), 1969 (P.groenlandicus; blood protein polymorphism; E. Canada), 1977 (Marine mammals; serological studies); Nakagawa 1971a (Cetacea; sialic acid in cartilage protein polysaccharide), 1971b (Cetacea; mucropolysaccharide from cartilage; protein polysaccharide contains large amount of sialic acid); Nakagawa et al. 1964 (Cetacea; crystalline sialic acid in nasal cartilage); Nakai 1959 (Cetacea; amino acid composition of meat from various body parts), 1963 (Balaenoptera physalus; muscle extracts; nitrogenous compounds); Nakashima & Tanaka 1966a (Cetacea; chondroitin sulfate production from nasal cartilage), 1966b (Cetacea; chondroitin sulfate manufacture from nasal cartilage); Nasedkina & Krasnitskaya 1972 (Cetacea; determination of creatine & creatinine in muscle); Nash & Mach 1971 (Zalophus californianus; immunoglobin classes, IgG, IgM & IgA; characterization by serologic cross-reactivity, molecular size, & binding by human free secretory component); Nikolaeva 1954 (Balaenoptera physalus; amino acid composition of meat); Nikonova 1957 (Balaenoptera physalus; nitrogen compounds in blubber); Ogata 1951/52 (Cetacea; methionine content of protein of Japanese food); Ogawa et al. 1958 (Cetacea; amino acid composition of meat); Okada et al. 1953a (Cetacea; glutathione determination by polarography); Olafson & Thompson 1974 (Halichoerus grypus; Callorhinus ursinus; isolation of heavy metal-binding proteins; metallothioneins of Cu & Cd); Olenchenko 1972b (Pusa caspica; change in volume of albumin & irreplaceable amino acid during growth & development); Owen & Hochachka 1974 (Cetacea; purification & properties of muscle aspartate & alanine transaminases & their role in energy metabolism during diving); Partman & Schlaszus 1973 (Balaenoptera acutorostrata; muscle free amino acids, anserine & carnosine); Perks & Vizsolyi 1974 (Pinnipedia; neurohypophyseal peptides during fetal life); Pernia et al. 1979 (Mirounga angustirostris; protein catabolism during prolonged fasting), 1980 (Mirounga angustirostris; urea turnover during prolonged fasting); Pocchiari et al. 1962 (Cetacea; β-alanyl-3-methylhistidine (baleine)); Popov et al. 1976 (Orcinus orca; amino acid composition of meat); Pritchard & Smith 1960 (Cetacea; composition & amino acid composition of meat); Prosturyakov 1972 (Cetacea; chymotrypsinogen content of different spp.); Puppione 1969 (Phoca vitulina; Leptonychotes weddelli; Zalophus californianus; Callorhinus ursinus; Eumetopias jubata; Odobenus rosmarus; physical & chemical characterization of serum lipoproteins), 1978 (Phoca vitulina; Mirounga angustirostris; serum lipoproteins during alimentary lipemia; electrophoresis of LDL, VLDL, HDL & chylomicrons); Puppione & Coggiola 1966 (Eumetopias jubata; Mirounga angustirostris; Phoca vitulina; serum protein distribution); Puppione et al. 1971 (Orcinus orca; serum lipoproteins; distribution of classes (VLDL; LDL; HDL) & their lipid composition; electrophoretic patterns), 1970 (Pinnipedia; serum lipoproteins, partial characterization in the density interval of 1.04-1.06 G.M.L.); Puppione & Nichols 1970 (Phoca vitulina; Zalophus californianus; Odobenus rosmarus; Tursiops truncatus; characterization of the chemical & physical properties of serum lipoproteins); Radola 1968 (Cetacea; radiation-induced hybridation of proteins; serum albumins); Rakestraw & Swain 1923 (Eumetopias jubata; uric acid content of the blood); Ramaekers et al. 1979 (Cetacea; β-crystallins); Reichert 1962 (Megaptera novaeangliae; proteinases in pituitaries); Ridgway et al. 1968 (Tursiops gilli; Tursiops truncatus; Phocoenoides dalli; Lagenorhynchus obliquidens; chemical & physical characteristics of blood; BUN & glutamic oxaloacetate transaminase); Ridlington et al. 1981 (Marine mammals; characterization of metallothionein; Cu-binding); Riedman & Ortiz 1979 (Mirounga angusterostris; changes in milk composition during lactation; proteins; proximate nutrients); Roberge & Charbonneau 1971 (Brown bears; urea cycle enzymes of liver; carbamyl phosphate synthetase & transferase; arginosuccinate synthetase; arginosuccinase; arginase); Ronald et al. 1969 (Pagophilus groenlandicus; physical blood properties; electrophoresis of albumin (11 bands); hemoglobin values); Saito & Ishihara 1956a (Cetacea; isolation & purification of stomach pepsin), 1956b (Cetacea; pepsin properties), Saito et al. 1957a (Cetacea; amino acid composition of pepsin), 1957b (Cetacea; free amino acids from pepsin digests of various proteins); Sasano & Ota 1964 (Balaenoptera physalus; Physeter sp.; pancreatic proteolytic enzymes); Sasano & Yoshiwara 1965 (Physeter sp.; pancreatic proteolytic enzymes); Schmidt-Nielsen et al. 1959 (Phoca vitulina; urea excretion & diving); Schmidt-Nielsen & Johansen 1932 (Balaenoptera physalus; composition of urine; uric acid, urea, ammonia, protein, creatinine, total solids, PO_4, Cl, Ca, Mg, Na & F); Schulze 1950 (Cetacea; meal in human nutrition; amino acid comosition; digestible protein, fat & ash); Seal & Doe 1966 (Marine mammals; role of corticosteroid-binding globulin in pregnancy); Seal et al. 1971a (Lobodon carcinophagus; Lepto-

nychotes weddelli; Mirounga leonina; blood chemistry and protein polymorphism; serum urea, uric acid, creatinine, hemoglobin, globulin & protein; electrophoresis of proteins); Shaughnessy 1969 (Leptonychotes weddelli; transferrin polymorphism & population structure), 1970 (Arctocephalus sp.; serum protein variations & taxonomy), 1974 (Mirounga leonina, electrophoresis of blood & milk proteins); Shergin et al. 1967 (Pinnipedia; hairless seal; chemical composition of milk; total protein, nitrogen & dry matter); Shibata 1951 (Physeter sp.; nitrogen distribution in toko-meat); Shun'ichi et al. 1983 (Callorhinus ursinus; composition of carbohydrates & proteins); Siegmund 1959 (Marine mammals; treatment of sea-animal proteins); Simonsen et al. 1982a (Pusa hispida; Pagophilus groenlandicus; Cystophora cristata; electrophoretic variations in enzymes of liver & muscle; polymorphism), 1982b (Odobenus rosmarus; electrophoretic variation in blood & muscle albumin, proalbumin, transferrin; 21 enzymes; Thule, Greenland); St. Aubin et al. 1979 (Pagophilus groenlandicus; handling stress on plasma enzymes; aspartate aminotransferase, alanine aminotransferase, γ-glutamyl transferase, leucine aminotransferase, aldolase & creatine kinase); St. Aubin & Geraci 1977 (Pagophilus groenlandicus; Pusa hispida; Halichoerus grypus; Delphinapterus leucas; tissue distribution & plasma levels of enzymes; alanine aminotransferase; aspartate aminotransferase; ornithine carbamyltransferase; sorbitol dehydrogenase; spp. & tissue differences); Sushko & Emel'yanenko 1957 (Physeter sp.; pancreatic tryptase activity); Suyama & Maruyama 1969a (Cetacea; β-alanylhistidine in muscle), 1969b (Delphinus delphis; Balaenoptera borealis; carnosine, anserine & balenine in muscle); Suyama et al. 1977 (Balaenoptera physalus; Physeter catodon; Megaptera novaeangliae; Stenella coeruleoalba; free amino acids, balenine, peptides & imidazole in muscle tissue); Suzuki et al. 1974 (Callorhinus ursinus; peripheral vasodilating action of peptide from skeletal muscles from different ages & sexes); Takagi 1950 (Marine mammals; heat-coagulation of water-soluble proteins); Takao et al. (Balaenoptera borealis; stomach pepsin); Takao 1944 (Pinnipedia; Cetacea; protease); Takemura 1927a (Balaenoptera physalus; Balaenoptera borealis; protein content in milk), 1927b (Cetacea; synovial fluid; total nitrogen; nitrogen compounds); Tamiya 1977 (Pinnipedia; Otariidae; ATPase accelerating peptides of muscle), 1977a (Pinnipedia; Otariidae; ATPase accelerating peptides of muscle); Tamiya & Matsumoto 1979 (Callorhinus ursinus; peptide from muscle hydrolyzate accelerates ATPase activity); Tamiya et al. 1976 (Callorhinus ursinus; effect of muscle peptide on actomyosin ativity of ATPase); Taverner 1975 (Cetacea; meal & solubles as dietary proteins for growing pigs & Hg accumulation in tissues); Todo & Seno 1970 (Cetacea; sialic acid in keratin sulfate from cartilage); Travis et al. 1971 (Physeter catodon; Balaenoptera physalus; Balaenoptera borealis; Megaptera novaeangliae; electrophoretic properties of haptoglobin & hemoglobin); Travis & Sanders 1972 (Megaptera novaeangliae; Balaenoptera physalus; Balaenoptera borealis; plasma immunoglobulins; structure); Tsunoo et al. 1967 (Callorhinus ursinus; Phoca vitulina; Mirounga angustirostris; histidine compounds in the musculature & brain); Undrum et al. 1982 (Balaenoptera acutorostrata; ophine from meat in man's urine); Usai Virdis & Casolo Pernecco 1977 (Marine mammals; glutaminase in ammoniotelic, uricotelic & ureotelic organisms); Voogt & de Vries 1966 (Cetacea; isolation of balenine); Waterworth 1964 (Cetacea; nutritive value; available amino acids & amino acid composition of protein concentrates); Wollenberger et al. 1958 (Cetacea; porpoise orthophosphate & phosphocreatine content of liver); Woodward 1976 (Marine mammals; milk & lactation; chemistry of casein; review); Worthy 1982 (Pagophilus groenlandicus; energy sources during post-weaning period; protein); Worthy & Lavigne 1982 (Pagophilus groenlandicus; change in blood properties of fasting & feeding pups after weaning; serum glutamyl pyruvate transaminase; creatine phosphokinase; 0-63 days), 1983 (Pagophilus groenlandicus; energetics of fasting & subsequent growth of weaned pups); Yamagawa & Shibuya 1926 (Balaenoptera physalus; amino acid composition of muscular protein); Yazawa 1933 (Cetacea; muscle histidine & lysine), 1935 (Balaenoptera physalus; nitrogeneous compounds); Yoneda 1974 (Balaenoptera borealis; preparation & properties of carboxypeptidase A), 1980 (Balaenoptera borealis; amino acid composition & protein from purified pancreatic procarboxylpeptidase A; electrophoresis).

PROXIMATE COMPOSITION

Ando et al. 1979 (Ursus arctos yesoensis; general composition & chemical properties of main components of milk; water, total protein, casein, whey proteins, fat, lactose, ash, Ca, P, Na, K, Fe, Mg & specific gravity); Ashworth et al. 1966 (Callorhinus ursinus; spp. difference in composition milk); Baker et al. 1963 (Ursus maritimus; gross composition & fat constitution); Bang et al. 1976 (Inuit; diet; Greenland), 1980 (Inuit; Pinnipedia; Inuit diet (seal) composition; ash, water, protein, fat, individual fatty acids, cholesterol & carbohydrates); Ben Shaul 1962 (Cystophora cristata; Pagophilus groenlandicus; Halichoerus grypus; Zalophus californianus; milk); Bjornhag et al. 1979 (Pinnipedia; Cetacea; post-natal growth & milk composition correlation; protein, fat & lactose); Botta et al. 1982 (Pagophilus groenlandicus; effect of sex, age & carcass cut on composition of meat), 1982a (Pagophilus groenlandicus; meat; molting); Celliers 1961 (Cetacea; chemical composition of products; fat, protein, ash, crude fiber & minerals); Cook & Baker 1969 (Pagophilus groenlandicus; composition of milk & pesticide residue content); Egorova & Kryuchkova 1967 (Cetacea; chemical composition & vitamin B_{12} content in liver, spinal cord, marrow, spleen & kidney); Eichelberger et al. 1940b (Cetacea; composition of dolphin's milk); Foll 1953 (Cetacea; nutritive value of protein meals); Geraci & Medway 1973 (Tursiops truncatus; effect of stress on hematologic & plasma chemical parameters; simulated study); Hewitt 1954 (Cetacea; solubles as pig feed); Jenness 1974 (Marine mammals; milk); Jenness & Sloan 1970 (Marine mammals; milk); Jenness et al. 1981 (Enhydra lutris; milk); Kizevetter 1950 (Histriophoca fasciata; Erignathus barbatus; Pusa hispida; technical & chemical characteristics); Kyte 1956 (Eumetopias jubata; technological studies on processing; glycogen); Lantz & Gunase-

kera 1956 (Delphinus delphis; commercial products, water, ash, fat & protein content of edible flesh, blubber, head, bone, tail, fin, liver, intestine & other viscera); Lauer & Baker 1969a (Delphinapterus leucas; Balaenoptera physalus; gross composition & fatty acid constitution of milk); Lavigne et al. 1982 (Pagophilus groenlandicus; changes in composition & energy content in milk during lactation; lipid, energy, protein & ash content); Le Boeuf & Ortiz 1977 (Mirounga angustirostris; milk); Marini & Blair 1971 (Leptonychotes weddelli; Lobodon carcinophagus; histological structure & biochemical constituents of Antarctic mummies); Merino 1953 (Cetacea; composition & nutritive value of meat; water, protein, fat, ash & several minerals), 1954 (Cetacea; composition & nutritive value of meat; water, protein, lipid, ash, minerals & energy value); Morshtyn 1967 (Pagophilus groenlandicus; Cystophora cristata; technological characteristics); Mrochkov & Kiselev 1972 (Physeter sp.; body parts; Antarctica); Nelson & Barnett 1970 (Callorhinus ursinus; meat); Ohta et al. 1975 (Callorhinus ursinus; body composition; water metabolism), 1983 (Balaenoptera physalus; milk); Pedersen 1952a (Megaptera nodosa; Balaenoptera musculus; milk; iodine No., saponification No., unsaponifiable matter & fatty acids), Petrov 1933 (Pagophilus groenlandicus; physical & chemical characteristics); Pilson & Kelly 1951 (Zalophus californianus; milk); Riedman & Ortiz 1979 (Mirounga angustirostris; milk, changes during lactation); Ronald & Kay 1982 (Pusa sibirica; haematology & plasma chemistry in captives); Saiki 1954a (Berardius bairdi; fatty acid composition of liver oil; protein, ash, fat & water); Schmidt-Nielsen & Frog 1933 (Balaenoptera musculcus; Balaenoptera physalus; Balaenoptera physalus; milk; lipid, ash & protein); Schulze 1950 (Cetacea; meal in human nutrition; fat, ash & amino acid composition); Shergin et al. 1967 (Pinnipedia; hairless seals; milk); Sidwell 1981 (Cetacea; chemical & nutritional composition); Stewart et al. 1983 (Pagophilus groenlandicus; lactose in milk); van Horn & Baker 1971 (Pagophilus groenlandicus; stage of lactation on composition of milk); Watanabe & Suzuki 1950a (Physeter sp.; body parts), 1950b (Cetacea; body parts); Williams & Pulley 1983 (Enhydra lutris; haematology & blood chemistry); Worthy 1981a (Pagophilus groenlandicus; body size & composition during post-weaning); Yamada 1946 (Physeter macrocephalus; Megaptera nodosa; Balaenoptera musculus; Balaenoptera physalus; proximate composition of the hide, distribution of fat in the corium layers).

REPRODUCTION

Aman 1973 (Callorhinus ursinus; gonadotropic factor effecting onset of maturity in female), 1975 (Callorhinus ursinus; gonadotropic factors & maturity of female); Amoroso 1952 (Pinnipedia; placentation); Amoroso et al. 1965 (Pinnipedia; reproduction & endocrine organs of unborn, newborn & adult), 1951a (Pinnipedia; reproductive organs of near-term & newborn), 1951b (Halichoerus grypus; lactation); Amoroso & Matthews 1952a (Halichoerus grypus; reproduction & lactation); 1952b (H. grypus; reproduction & lactation), Arvy & Pilleri 1983 (Hyperoodon ampullatus; Hyperoodon planifrons; Physeter macrocephalus; Orcinus orca; migration & reproduction); Backhouse & Hewer 1956 (Halichoerus grypus; delayed implantation); Bartlett & Weir 1974 (Callorhinus ursinus; circulating levels of oestradiol-17β in early pregnancy estrogen surge prior to ovum implantation); Belov 1969 (Pagophilus groenlandicus; Cystophora cristata; microstructure of lactating gland); Bergman et al. 1981 (Pinnipedia; Phoca vitulina; PCB; Baltic); Best 1982 (Balaenoptera acutorostrata; seasonal abundance, feeding, reproduction, age & growth; Durban; Antarctic); Best & Fisher 1974 (Monodon monoceros; seasonal breeding); Bigg 1972 (Phoca vitulina; control of annual reproduction in the female); Bigg & Fisher 1974 (Phoca vitulina; reproductive cycles of females; Vancouver I.); Blix & Ronald 1979 (Pinnipedia; Otariidae; Phocidae; testicular temperature); Born 1982 (Cystophora cristata; reproduction of female; S. Greenland); Boshier 1977 (Halichoerus grypus; corpus luteum; implantation); Boulva & McLaren 1979 (Phoca vitulina; birth size, birth date, lactation period, mating, molting, maturity, ovulation & implantation); Bowen et al. 1981 (Pagophilus groenlandicus; temporal changes in reproductive potential of females); Brodie 1971 (Delphinapterus leucas; growth, reproduction & behaviour of Cumberland Sound, Baffin I. population); Bullough 1951 (Marine mammals; sexual cycle); Burton et al. 1975 (Halichoerus grypus; perinatal activities); Burns 1981 (Histriophoca fasciata; handbook; general), 1981a (Erignathus barbatus); Canivenc 1960 (Marine mammals; implantation); Carnio et al. 1982 (Arctocephalus pusillus; management & breeding at Metro Toronto Zoo, Canada; gestation, weaning, growth & feeding); Carrick et al. 1962 (Mirounga leonina; annual cycle in relation to age & sex); Chapskii 1965a (Pusa caspica; growth & onset of sexual maturity in females); Coulson & Hickling 1964 (Halichoerus grypus; breeding biology; Farne I., England); Cowan et al. 1981 (Callorhinus ursinus; reproductive bioenergetics); Craig 1964 (Callorhinus ursinus; histology of reproduction & estrus cycle), 1966 (C. ursinus; reproduction in female); Crawley et al. 1977 (Arctocephalus forsteri; activity budgets during breeding season); Daniel 1967 (Callorhinus ursinus; studies on the diapausing blastocyst), 1968 (Marine mammals; electrophoretic patterns of uterine fluid during delayed implantation), 1971a (C. ursinus; growth of preimplantation embryo; correlation with changes in uterine protein; progesterone), 1971b (C. ursinus; embryo dormancy), 1974 (C. ursinus; circulating levels of 17-β-estradiol during pregnancy showing estrogen surge preceding implantation), 1975 (Callorhinus ursinus; concentration of circulating progesterone during early pregnancy), 1981 (C. ursinus; other Pinnipedia; delayed implantation due to growth inhibitor of blastocyst); Daniel & Krishnan 1969 (Callorhinus ursinus; relationship between uterine fluid components & the diapausing state of blastocysts during delayed implantation); Davis & Anderson 1976 (Halichoerus grypus; oil pollution & breeding); De Long et al. 1973 (Zalophus californianus; premature births associated with high DDT (& metabolites) & PCB in brain, liver & blubber in females & pups); De Master 1981 (Pinnipedia; average age of first reproduction); Duinker & Hellebrand 1979a (Pinnipedia; transplacental transfer of organochlorines from female lipid tissues to unborn); Eckstein et al. 1959 (Marine mammal; physiology

of implantation); Enders 1963 (Marine mammals; delayed implantation); Engelhardt & Ferguson 1980 (Pagophilus groenlandicus; Halichoerus grypus; adaptive hormone changes during the post-natal period; endocrine regulation during parturition, lactation & initiation of mating); Fay 1981 (Odobenus rosmarus; handbook); Fay & Ray 1979 (Odobenus rosmarus; reproductive behavior & population structure); Fedoseev 1963 (Pusa hispida; maturation & rates of production), 1964 (Pusa hispida; embryonic & post-embryonic growth & sexual maturation); Fedak & Anderson 1981 (Halichoerus grypus; energetics); Finch 1965 (Phoca vitulina; mother-infant relationship in captivity); Finley et al. 1983 (Pusa hispida; distinctive large breeding population inhabiting Baffin Bay pack ice); Fisher 1954 (Phoca vitulina; delayed implantation); 1954a (Pagophilus groenlandicus; N.W. Atlantic), 1954b (P. groenlandicus; N.W. Atlantic); Fogden 1971 (Halichoerus grypus; mother-young behavior); Foresman & Daniel 1983 (Ursus americanus; pregnant & nonpregnant; plasma progesterone concentrations; delayed implantation); Frazer & Huggett 1973 (Cetacea; specific fetal growth rate); Frost & Lowry 1981a (Pusa hispida; Pusa sibirica; Pusa caspica; handbook); Gambell 1968 (Balaenoptera borealis; seasonal cycle & reproduction in S. hemisphere); Gentry 1981a (Callorhinus ursinus); Gentry et al. 1981 (Callorhinus ursinus; estrus); Gibbney 1953 (Mirounga leonina; delayed implantation); Gulyas & Daniel 1969 (Pinnipedia; incorporation of labelled nucleic acid & protein precursors by diapausing & nondiapausing blastocytes); Hamlett 1935 (Marine mammals; delayed implantation & discontinuous development); Hammond & Marshall 1952 (Pinnipedia; life cycle); Harrison 1963 (Pinnipedia; delayed implantation; Great Britain), 1964 (Phoca vitulina; delayed implantation), 1969b (Marine mammals; reproduction & reproductive organs); Harrison & Kooyman 1968 (Pinnipedia; general physiology); Harrison et al. 1952 (Pinnipedia); Helle et al. 1976a (Pusa hispida; PCB & DDT level & reproduction; Bothnian Bay), 1976c (Pusa hispida; Halichoerus grypus; environmental poisons); Hewer 1964 (Halichoerus grypus; fetal growth rate; implantation & female cycle), 1964a (Halichoerus grypus; determination of age, sexual maturity, longevity & life table); Hewer & Backhouse 1968 (Halichoerus grypus; embryology & fetal growth); Jensen & Jansson 1976 (Pinnipedia; DDT & PCB & metabolites; inhibition of reproduction; Baltic Sea); Jensen et al. 1979 (Pinnipedia; PCB & DDT & reproduction; anthropogenic substances number & identity); King 1983 (Pinnipedia; general); Kloes & Rahn 1975 (Mirounga leonina; care of & partially successful breeding at Berlin Zoo); Kooyman 1981 (Hydrurga leptonyx; handbook), 1981a (Leptonychotes weddell); Lander 1981 (Callorhinus ursinus; life table & biomass estimate); Lavigne 1982 (Pinnipedia; cold & breeding systems); Laws 1956 (Marine mammals; growth & sexual maturity), 1981 (Lobodon carcinophagus; Hydrurga leptonyx; Ommatophoca rossi; Mirounga leonina; Mirounga angustirostris); Leatherland & Ronald 1979 (Pagophilus groenlandicus; structure of neonate & adult testes); Ling & Thomas 1967 (Mirounga leonina; skin & hair; prenatal & early post-natal development & molting); Lockyer 1978 (Balaenoptera borealis; Balaenoptera physalus; growth & energy balance & female reproduction); Mansfield 1956 (Odobenus rosmarus; male cycle), 1958a (Leptonychotes weddelli; breeding behavior & reproductive biology); Mathesin et al. 1962 (Euretopias jubata; breeding habits, growth and stomach contents); Matthews & Harrison 1949 (Pinnipedia; subsurface crypts, oogenesis & corpus luteum in ovaries); McLaren 1955b (Pusa hispida); 1958b (Erignathus barbatus; growth & reproduction); McTaggart 1972 (Phoca vitulina richardi; gross embryological development & fetal growth); Miyazaki 1977 (Stenella coeruleoalba; growth & reproduction; N. Pacific, Japan); Moors 1980 (Enhydra lutris; sexual dimorphism in body size; roles of food habits & breeding systems); Mrosovsky 1981 (Marine mammals; body fat during pregnancy & lactation); Nazarenko 1971 (Pagophilus groenlandicus; sexual maturity; missed pregnancies in females); Neugelbauer 1967 (Mirounga leonina; breeding, Stuttgart Zoo); O'Farrell & Daniel 1971 (Callorhinus ursinus; estrogen binding in uteri with delayed implantations); Oliver 1912/1913 (Callorhinus ursinus; spermatogenesis); Oritsland 1975 (Cystophora cristata; sexual maturity & reproductive performance of females); Osborne 1983 (Eumetopias jubatus; breeding; parturition); Pearson & Enders 1951 (Callorhinus ursinus); Perks & Vizsolyi 1973 (Pinnipedia; neurohypophysis of unborn mammals); Pierotti 1980 (Pinnipedia; Otariidae; Phocidae; cold climate & evolution of breeding system); Pitcher 1977 (Phoca vitulina; Prince William Sound - Copper River delta area); Popov 1960 (Cystophora cristata; sexual maturity); Potelov 1975 (Erignathus barbatus; Barents Sea); Racadot 1962 (Leptonychotes weddelli; comparison of several cell types of anterior pituitary lobe during gestation & lactation); Raeside & Ronald 1981 (Phoca vitulina; plasma concentrations of estrone, progesterone & adrenocorticoids during late pregnancy & after parturition); Rand 1955 (Arctocephalus pusillus; females); Reijnders 1980 (Phoca vitulina; PCB, o,p^1-DDT, DDT, DDE, p,p^1-DDE, dieldrin, aldrin, endrin, endosulfan, heptachlor epoxide, pentachlorobenzene, hexachlorobenzene, Se, Hg & CH_3Hg residues & reproduction), 1982b (Pinnipedia; fertility decrease on exposure to large amounts of PCB; The Netherlands); Reiter et al. 1981 (Mirounga angustirostris; female competition & reproductive success); Ridgway & Green 1967 (Cetacea; sexual rhythm in porpoises); Ridgway & Harrison 1981 (Pinnipedia; Otariidae; Odobenidae), 1981a (Pinnipedia; Phocidae; handbook); Reijnders 1979 (Phoca vitulina; heavy metal & organochlorine residues; Schleswig Holstein, Denmark & The Netherlands); Sawyer-Steffan & Kirby 1980 (Tursiops truncatus; serum steroid hormone levels in captive females in correlation with reproduction status & their application to ovulation induction in captivity); Sawyer-Steffan et al. 1983 (Tursiops truncatus; progesterone & estrogens in pregnant & non-pregnant & induced ovulations); Seal & Doe 1966 (Marine mammals; role of corticoid-binding globulin in pregnancy); Sergeant 1973c (Pinnipedia; environment & reproduction); Sergeant et al. 1973 (Tursiops truncatus; age, growth & maturity; N.E. Florida); Sinha 1976 (Hydrurga leptonyx; Ommtophica rossi; Lobodon carcinophagus; regression of Leydig cells & testosterone levels during the nonbreeding season); Sleptsov 1949 (Pinnipedia); Slijper 1956 (Cetacea; Pinnipedia; gestation & birth); Sokolov 1961 (Delphinus delphis; determination of phase of reproduction cycle using

vaginal smears); Starks 1927/1928 (Callorhinus ursinus; spermatogenesis); Stewart et al. 1981 (Pagophilus groenlandicus; parturition); Sweeney 1978 (Pinnipedia); Testa et al. 1981 (Leptonychotes weddelli; population dynamics; E. McMurdo Sound, Antarctica); Van Forest 1978 (Zalophus californianus; captivity; Ouwehand Zoo); Vizsolyi 1972 (Callorhinus ursinus; neurohypophyseal physiology during fetal development & pregnancy), 1974 (Callorhinus ursinus; isolation of arginine vasotocin from fetal neurohypophyses); Vizsolyi & Perks 1969 (Callorhinus ursinus; new neurohypophyseal principle); Vladimirov 1983 (Pinnipedia; female reproduction; Urilye Lair, Mednyi I., USSR); Warn 1965 (Callorhinus ursinus; histology of reproduction & estrus cycle in maturing females); Weber 1981 (Leptonychotes weddelli; hemoglobins from unborn & mothers); Wirtz 1968 (Monachus schauinslandi; reproduction, growth & development & juvenile mortality); Xu et al. 1983 (Balaenoptera davidsoni; Balaenoptera acutorostrata; eat Amonodytes personatus & Euphausia pacifica; body length & embryo length); York 1983 (Callorhinus ursinus; age at first reproduction); Zoological Society of London 1978 (Zalophus californianus; Arctocephalus pusillus; Arctocephalus doriferus; Arctocephalus australis; Eumetopias jubata; Mirounga leonina; Mirounga angustirostris; Halichoerus grypus; Phoca vitulina; Otaria byronia; captivity).

SPECIAL TOPICS

Ackefors 1977 (Cetacea; production in the sea); American Society of Mammalogist's Committee for Marine Mammals 1967 (Marine mammals; standard measurement); Allen 1975 (Pagophilus groenlandicus; life table; N.W. Atlantic); Anas & Worlund 1975 (Callorhinus ursinus; blubber sampling techniques); Anders et al. 1967 (Pagophilus groenlandicus; economic survey; E. coast of Baffin I.); Andersen 1969 (Marine mammals; biology; book); Anderson et al. 1979 (Halichoerus grypus; pup mortality & causes); Andreev 1978 (Calorhinus ursinus; Eumetopias jubata; Phoca vitulina; Pusa caspica; Pagophilus groenlandicus; Hydrurga leptonyx; Pusa sibirica; Pusa hispida; Cetacea; structural & functional properties of the eye); Anonymous 1982 (Pagophilus groenlandicus; Cystophora cristata; report on meeting of ad hoc working group; N.W. Atlantic); Arnold 1972 (Phocoena phocoena; predation by white shark, Carcharodon carcharias); Arvy & Pilleri 1983 (Hyperoodon ampullatus; Hyperoodon planifrons; Physeter macrocephalus; Orcinus orca; migration & reproduction); Asper 1975 (Cetacea; techniques in live capture of smaller spp.); Aurioles et al. 1983 (Zalophus californianus; winter migration of subadult males; S. Baja California); Bada et al. 1983 (Monodon monoceros; age determination by aspartic acid racemization); Baker et al. 1980 (Halichoerus grypus; pathology), 1970 (Callorhinus ursinus; general); Bannister & Baker 1967 (Cetacea; food & feeding of baleen; Durban); Bechervaise 1962 (Hydrurga leptonyx; branding); Beck & Smith 1976 (Pusa hispida; Erignathus barbatus; seal finger; medical problem); Benjamin & Christiansen 1973 (Hyperoodon ampullatus; natural history); Bernstein et al. 1981 (Zalophus californianus; ultrastructure of intestinal brush border membranes); Bertram 1940 (Leptonychotes weddelli; Lobodon carcinophagus; biology; comparative behavior); Berzin 1972 (Physeter sp.; general; book); Best 1969 (Physeter catodon; distribution & movements; W. coast of South Africa), 1978 (Physeter macrocephalus; social organization), 1982 (Balaenoptera acutorostrata; seasonal abundance, feeding, reproduction, age & growth; Durban, Antarctic); Bester 1975 (Arctocephalus pusillus; functional morphology of kidney); Bigg 1969 (Phoca vitulina; British Columbia), 1973 (Zalophus californianus; census of S. Vancouver I.); Blix et al. 1975a (Pinnipedia; brown adipose & its significance in venous plexuses); Bonnell et al. 1978 (Pinnipedia; general; S. California); Bonner 1972a (Halichoerus grypus; Phoca vitulina; Europe); Bonner & Hickling 1971 (Halichoerus grypus; Farne I., England); Bonner & McCann 1982 (Arctocephalus gazella; neck collars; tagging); Born & Kristensen In Press (Odobenus rosmarus rosmarus; biology & exploitation; Thule, Greenland); Boulva 1973 (Phoca vitulina; E. Canada); Bowen 1982 (Pagophilus groenlandicus; age structure; catch, 1952-1980); Bowen & Sergeant 1983 (Pagophilus groenlandicus; mark recapture estimates of production in N.W. Atlantic); Bowen et al. 1983 (Pagophilus groenlandicus; age estimation using dentinal annuli); Bowen & Sergeant 1983 (Pagophilus groenlandicus; mark-recapture estimates of populations, N.W. Atlantic); Braham 1983 (Grampus griseus; records in N.E. Pacific); Braham & Krogman 1977 (Balaena mysticetus; Delphinapterus leucas; population biology; Bering, Chukchi & Beaufort seas); Brain & Leith 1968a (Pinnipedia; measurement of surfactants of lung), 1968b (Pinnipedia; alveolar macrophages in lungs); Brodie 1969 (Delphinapterus leucas; mandibular layering & age determination); Brooks 1953 (Odobenus rosmarus; importance to Inuit economy), 1954a (Delphinapterus leucas; investigation), 1954b (D. leucas; investigation), 1955 (D. leucas; investigation), 1956 (D. leucas; investigation), 1957 (D. leucas; investigation); Brown & Mate 1983 (Phoca vitulina; abundance movements & feeding habits; Netarts Bay & Tillamook Bay, Oregon; eat fish; radio tagging; fecal analysis); Brown et al. 1975 (Callorhinus ursinus; renal fibrosarcoma), 1980 (Zalophus californianus; metastatic adenosarcoma); Brownell & Le Boeuf 1971 (Zalophus californianus; mortality natural or artifact?); Bryden 1971 (Mirounga leonina; size & growth of viscera), 1972 (Mirounga leonina; body size & composition; absolute measurements & estimates from bone dimensions), 1972a (Marine mammals; growth & development); Bryden & Erickson 1976 (Lobodon carcinophagus; Ommatophoca rossi; body size & composition of crabeater seals & tissues; Ross seal organ size); Burkhardt et al. 1934 (Cetacea; pigment in oil); Burne 1909 (Odobenus rosmarus; viscera); Burns 1965 (Odobenus rosmarus; ecology & management; Alaska), 1967 (Erignathus barbatus); Burns & Frost 1979 (Erignathus barbatus; natural history & ecology); Burns & Gavin 1980 (Cystophora cristata; recent records; W. Beaufort Sea); Burns et al. 1980 (Marine mammals; relationship of distribution, densities & activities to sea ice conditions); Burton et al. 1975 (Halichoerus grypus; perinatal activities); Bychkov 1971/72 (Callorhinus ursinus; age variation of body length & weight, Tyuleny I.); Cahalane 1947 (Marine mammals; N. America; book); Caldwell & Caldwell 1971 (Cetacea; sounds produced by stranded; Florida); Canadian Arctic Resources Committee

1980 (Marine mammals; marine traffic forecast; N.W. Passage); Carrick et al. 1962 (Mirounga leonina; annual cycle & age & sex); Chapman 1962 (Callorhinus ursinus; problems in analysis of tagging experiments); Christiansen et al. 1969 (Marine mammals; uncoupling & recoupling of oxidative phosphorylation in brown adipose mitochondria); Chugunkov 1970 (Callorhinus ursinus; loss of tags; Commander I.); Clarke 1978a (Physeter macrocephalus; structure & proportions of spermaceti organ), 1978c (Physeter macrocephalus; buoyancy control as a function of spermaceti organ); Clarke et al. 1978 (Cetacea; Physeter sp.; observations & marking off coast of Chile in 1964); Clements et al. 1970 (Pinnipedia; Otariidae; pulmonary surfactants & evolution of lungs); Cline et al. 1969 (Lobodon carcinophagus; Leptonychotes weddelli; Mirounga leonina; immobilizing & collecting blood); Cockrill 1960 (Cetacea; pathology; veterinary study); Comeau 1923 (Pagophilus groenlandicus; lower Gulf of St. Lawrence, Quebec); Cordes 1982 (Cetacea; cause of strandings); Coulson & Hickling 1964 (Halichoerus grypus; breeding; biology; Farne I., England); Cowan 1966 (Globicephala melaena; pathology); Crawley et al. 1977 (Arctocephalus forsteri; activity budgets in breeding season); Crawley & Brown 1971 (Arctocephalus forsteri; measurements of tagged pups & population estimates; Taumaka Open Bay I., Westland, New Zealand); Croxall & Hiby 1983 (Leptonychotes weddelli; food; Signy I. & S. Orkney I., Antarctica; fecundity & survival); Curran & Asher 1974 (Eschrichtius robustus; investigation of blubber thickness using ultrasonography); Darling 1977 (Eschrichtius glaucus; Vancouver I.; aspects of behavior & ecology); Davis et al. 1978 (Odobenus rosmarus; numbers & distribution central Canadian high Arctic), 1980 (Marine mammals; present & future status; Canada); Davson & Graham 1974 (Pinnipedia; comparative physiology of the eye); Dawe & Berard 1971 (Pinnipedia; workshop on hematopoietic & lymphoreticular neoplasms); Degerbol & Nielsen 1930 (Delphinapterus leucas; biological observation & measurement of female & newborn); De Master 1978 (Leptonychotes weddelli; estimation & analysis factors that control population in McMurdo Sound, Antarctica); Denton 1963 (Cetacea; Balaenoptera musculus; buoyancy mechanisms; review); Department of Agriculture 1979 (Marine mammals; humane handling, care, treatment & transportation; rules & regulations); Diamond et al. 1980 (Zalophus californianus; edema disease); Dorrance & Roy 1978 (Ursus americanus; LiCl & $CuSO_4$ used in aversion conditioning tests); Douglas 1951 (Delphinapterus leucas; investigations; Churchill, 1950); Dunbar 1954 (Odobenus rosmarus; status in Canada), 1968 (Marine mammals; ecological development in polar regions), 1973 (Marine mammals; stability & fragility of Arctic ecosystems), 1977 (Marine mammals; evolution of polar ecosystems), 1981 (Marine mammals; physical cause and biological significance of polynyas & other open water in sea ice); Elsner et al. 1977 (Phoca vitulina; carotid body chemoreceptor reflexes & their interactions); Engelhardt 1976 (Pinnipedia; Phocidae; tissue biopsy method); Erickson & Hofman 1974 (Leptonychotes weddelli; Lobodon carcinophagus; Hydrurga leptonyx; Ommatophoca rossi; Mirounga leonina; Arctocephalus tropicalis; Arctocephalus forsteri; distribution & behavior); Estes 1977 (Enhydra lutris; population estimates & feeding behavior); Evans 1971 (Pinnipedia; Cetacea; delphinids; orientation behavior; radio telemetric studies), 1974 (Cetacea; odontocetes radio telemetric studies); Evans et al. 1972 (Cetacea; small spp. tagging methods); Farmer 1899 (Callorhinus ursinus; electrical experiment in pup branding in 1877); Farmer & Roberts 1971 (Halichoerus grypus; strandings; Isle of Man); Fay 1957 (Odobenus rosmarus; history & present status of populations), 1974 (Marine mammals; role of ice in ecology; Bering Sea), 1978 (Delphinapterus leucus; general); Fay & Kelly 1980 (Odobenus rosmarus; mass natural mortality; St. Lawrence I.; 1978); Fay et al. 1979 (Pinnipedia; Cetacea; post mortem procedures); Fedoseev 1973 (Erignathus barbatus; biological description & basis for krill limits; Sea of Okhotsk), 1982 (Odobenus rosmarus; dynamics of area of distribution & ecological differentiation of populations); Finch 1965 (Phoca vitulina; mother-infant relationship in captivity); Finley 1976 (Phoca vitulina; status studies; central District of Franklin, N.W.T.), 1978 (Pusa hispida; behavior & density during haul out in high Arctic; June 1977), 1979 (Pusa hispida; haul out behavior & densities; Barrow Str.); Finley et al. 1980 (Monodon monoceros; hunting; Canadian E. Arctic), 1982 (Delphinapterus leucas; abundance, distribution, stock identity, catch history & management, N. Quebec), 1983 (Pusa hispida; distinctive large breeding population; Baffin Bay pack ice); Finley & Johnson 1977 (Balaena mysticetus; numbers & distribution, Somerset I. - Bellot Str. area, 1976); Finley & Miller 1982 (Monodon monoceros; 1979 hunt & examination of harpoon gun technology; Pond Inlet, N. Baffin I.); Finley & Renaud 1980 (Marine mammals; N. Baffin Bay; winter); Fletemeyer 1978 (Arctocephalus pusillus; laminae in teeth used for ageing); Flyger et al. 1967 (Ursus maritimus; capturing & handling; ecological research); Fogden 1971 (Halichoerus grypus; mother-young behavior); Fowler 1982 (Callorhinus ursinus; interactions with commercial fisheries); Fowler et al. 1979 (Pinnipedia; ecological models); Fraker 1978 (Cetacea; monitoring program; Mackenzie estuary, N.W.T.), 1979a (Balaena mysticetus; Delphinapterus leucas; spring migration in Beaufort Sea, Alaska), 1979b (Delphinapterus leucas; distribution abundance & relationship to physical & chemical characteristics of MacKenzie estuary, N.W.T.); Fraker et al. 1978 (Balaena mysticetus; Delphinapterus leucas; S. Beaufort Sea); Frazer & Huggett 1973 (Cetacea; specific fetal growth rates); Freeman 1968 (Delphinapterus leucas; winter observations; Jones Sound, N.W.T.); Frost & Lowry 1981 (Cetacea; foods & trophic relationships; Bering Sea); Frost et al. 1978 (Marine mammals; offshore demersal & epibenthic invertebrates; N.W. Chukchi & W. Beaufort seas); Galantsev et al. 1983 (Pusa caspica; ecological & physiological peculiarities of heart activity); Gambell 1970 (Physeter sp.; weight of whale & its parts), 1979 (Marine mammals; Arctic offshore development; circumpolar challenge); Garibaldi et al. 1979 (Phoca vitulina; Zalophus californianus; Mirounga angustirostris; Callorhinus ursinus; Eumetopias jubata; Pusa hispida; beachings); Garman et al. 1983 (Inia geoffrensis; cutaneous gout); Gaskin 1972 (Cetacea; Pinnipedia; general; book), 1982 (Cetacea; ecology; book); Gaskin et al. 1975 (Phocoena phocoena; preliminary movement study using radiotelemetry; Bay of Fundy); Genoways &

Choate 1976 (Pinnipedia; regulations pertaining to scientific specimens); Gentry & Johnson 1978 (Callorhinus ursinus; physical restraint for immobilizing), 1981 (Eumeptopias jubata; Callorhinus ursinus; predations of Eumetopias jubata on Callorhinus ursinus neonates); George & Paul 1970 (Marine mammals; biological investigation from Fletchers Island T-3; deep-sea & under-ice benthos; Arctic Ocean); George et al. 1971 (Pagophilus groenlandicus; histophysiological study of skeletal muscles); Geraci 1978 (Marine mammals; Pinnipedia; book, general; wild & zoo); Geraci et al. 1978 (Lagenorhynchus acutus; mass stranding; pathobiology; life history); Geraci & Engelhardt 1974 (Pagophilus groenlandicus; storage time, temperature & anticoagulants on hemograms; simulated field study); Geraci & Medway 1973 (Tursiops truncatus; stress on hematologic & plasma chemical parameters; simulated field study), 1974 (Tursiops truncatus; changes in hematology & chemistry during blood & plasma storage; simulated field study); Geraci & Smith 1975 (Pusa hispida; blood-sampling technique using vertebral extradural vein; functional haematology; Canadian Arctic); Geraci et al. 1979 (Pusa hispida; age, condition, sampling time & method on plasma chemical constituents in free-ranging); Geraci & St. Aubin 1979a (Phoca vitulina; Zalophus californianus; stress & disease in marine environment strandings), 1979b (Marine mammals; stranding workshop), 1979c (Pinnipedia; strandings); Gill & Hall 1983 (Eschrichtius robustus; use of near-shore & estuarine area of S.E. Bering Sea); Gilmartin & Morrow 1981 (Monachus schauinslandi; captive maintenance aids in defining causes of mortality); Goldsberry et al. 1976 (Orcinus orca; live capture techniques); Grainger et al. 1980 (Marine mammals; biology study; Brevoort Harbour & E. Baffin I., Canada); Gray 1927 (Cetacea; diving depth), 1928 (Cetacea; blubber); Greenwood et al. 1974 (Pinnipedia; physiology); Greenwood & Wild 1977 (Halichoerus grypus; fibroptic gastroscopy); Griner 1971 (Phoca vitulina geronimensis; malignant leukemic lymphoma); Gruber 1981 (Tursiops truncatus; ecology; Pass Cavallo area, Matagorda Bay, Texas); Guiler 1978 (Mirounga leonina; Neophoca cinerea; Arctocephalus pusillus; Hydrurga leptonyx; Lobodon carcinophagus; strandings; Tasmania); Hagenbeck 1962 (Odobenus rosmarus; in captivity); Halasz et al. 1974 (Phoca vitulina; renal recovery from ischemia); Hale 1962 (Kogia breviceps; S. Australia); Hall 1977 (Zalophus californianus; Pusa hispida; Erignathus barbatus; Phoca fasciata; nonlethal lavage device for sampling stomach contents), 1981 (Cetacea; aspects of natural history, Prince William Sound, Alaska); Hall et al. 1971 (Globicephala scammoni; strandings at San Clemente I.); Hall & Kelson 1959 (Marine mammals; mammalogy; N. America); Hamilton 1949 (Pinnipedia; weight, etc. of elephant seal); Hammarsten 1909 (Odobenus rosmarus; analysis of bile); Hammond & Elsner 1971 (Leptonychotes weddelli; transportation from Antarctica to temperate climates); Harbo 1960 (Odobenus rosmarus; harvest & utilization); Harington 1968 (Ursus maritimus; denning habits); Harrison & Hall 1978 (Delphinapterus leucas; Alaskan distribution); Harrison 1972 (Marine mammals; functional anatomy; book; Vol. 1), 1974 (Marine mammals; functional anatomy; book; Vol. 2); Harrison et al. 1968 (Pinnipedia; behavior & physiology; book); Harrison & King 1965 (Marine mammals; book, general); Harrison & Tomlinson 1956 (Cetacea; Pinnipedia; venous system observation); Hay & McClung 1976 (Monodon monoceros; Delphinapterus leucas; observations, Canadian high Arctic; summer, 1974); Hay & Sergeant 1976 (Cetacea; report on Arctic Islands pipeline); Hedges et al. 1979 (Phocoena phocoena; renicular morphology & renal vascular system); Henry et al. 1983 (Balaena mysticetus; gross anatomy of the respiratory system); Hensel & Sorensen 1980 (Ursus maritimus; age determination in live); Hessing 1981 (Eschrichtius robustus; spring migration into Bering Sea); Hewer 1964a (Halichoerus grypus; determination of age, sexual maturity, longevity & life table); Hill 1978 (Marine mammal; effects of underwater shock waves); Hochachka & Somero 1973 (Marine mammals; strategies of biochemical adaptations); Homestead et al. 1971 (Mirounga angustirostris; Cystophora cristata; Pagophilus groenlandicus; Phoca vitulina; portable instantaneous branding device); Horner 1977 (Marine mammals; history & recent advances in studies of the ice biota); Hsu & Coe 1971 (Leptonychotes weddelli; survival of historical structure & biochemical constituents in ancient mummified); Hubbard 1969a (Marine mammals; use in biomedical research), 1969b (Marine mammals; formation of a study center); Hubbard & Poulter 1968 (Pinnipedia; models for studies in comparative biology); Huber et al. 1982 (Megaptera nodosa; Phocoena phocoena; Orcincus orca; Eschrichtius gibbosus; Phocoenoides dalli; Lagenorhynchus obliquidens; sightings in Gulf of Farallones, California, 1971-79); Hull 1966 (Marine mammals; structure & functions of brown adipose); IATA 1975 (Marine mammals; live-animal regulations); Idyll 1968 (Physeter catodon; ambergris-neptunes treasure); International Nickel Company Inc. 1956 (Callorhinus ursinus; migration & monel tagging); Irvine 1970 (Cetacea; transportation); Irvine & Wells 1972 (Tursiops truncatus; tagging results); Irvine et al. 1982 (Cetacea; Tursiops truncatus; evolution of techniques for tagging small Odontoceti); Irving & Krog 1954 (Marine mammals; body temperature); Jakobsen 1979 (Cystophora cristata; production); Jameson 1975 (Enhydra lutris; observation of captive); Jenkinson 1973 (Marine mammals; comparative physiology of sweating); Jennings 1966 (Pinnipedia; Phocidae; elephant seal tagging); Johnson 1982 (Inia geoffrensis; sharing), 1979 (Delphinapterus leucas; fall observations; westward migration along central Alaska Beaufort Sea coast); Johnson et al. 1966 (Erignathus barbatus; Balaena mysticetus; food); Jonkel 1969 (Ursus maritimus; research in Canada), 1969a (Delphinapterus leucas; wintering in James Bay); Jonsgard 1966 (Balaenoptera physalus; biology); Jonsgard & Darling 1977 (Balaenoptera borealis; biology of E. Atlantic); Jordan & Clark 1899 (Callorhinus ursinus; experiments in herding & branding); Judge 1899 (Callorhinus ursinus; branding at St. George); Juul 1967 (Marine mammals; stability of plasma enzymes during storage); Kamenetskii 1929 (Pusa sibirica; blubber); Kanwisher & Sundnes 1966b (Cetacea; physiology of small spp.); Kapel 1972 (Cystophora cristata; age analysis), 1974 (Cystophora cristata; age composition & hunting), 1975 (Cystophora cristata; research & seal hunting), 1977 (Monodon monoceros; Delphinapterus leucas; Phocoena phocoena; catch in Greenland 1954-75 by year, month & region); Kawamura 1975 (Balaenoptera physalus; available source of energy & its

cost of locomotion; seasonal migration); Keiver & Ronald 1981 (Pagophilus groenlandicus; digestible energy); Kelly & Jensen 1960 (Zalophus californianus; chronic aortitis); Kenyon 1969 (Enhydra lutris; Pacific Ocean); Kerley & Bester 1983 (Arctocephalus gazella; body fluid whole; mass corrections from piece meal determination); Keyes 1965 (Callorhinus ursus; pathology); Kiliaan & Stirling 1978 (Odobenus rosmarus; overwintering in E. Canadian high Arctic); King 1964 (Pinnipedia; book); Kingsley 1979 (Ursus maritimus; fitting the von Bertalanffy growth equation to age & weight data); Kingsley et al. 1982 (Pinnipedia; distribution & abundance in high Arctic); Kleinenberg et al. 1964 (Delphinapterus leucas; investigation); Klinkhart 1966 (Delphinapterus leucas; Alaska); Knowles & Vollrath 1974 (Marine mammals; neurosecretion); Kondrashev 1980 (Pinnipedia; Soviet-American Symposium; biochemistry & physiology); Kooyman et al. 1981 (Leptonychotes weddelli; summer dives); Korzhuev & Glazova 1971 (Cetacea; biochemical aspect of adaptation), 1973 (Cetacea; biochemical aspects of adaptations); Koski & Davis 1979 (Marine mammals; distribution in N.W. Baffin Bay area, May-October 1978); Kosygin 1966 (Erignathus barbatus; size & weight; Bering Sea); Kosygin & Gol'tsov 1971 (Phoca vitulina; data on morphology & ecology; Tatar Str.); Krogh 1934 (Balaenoptera musculus; physiology); Krylov 1965 (Odobenus rosmarus; determination of age, rate of growth & analysis of age structure of Pacific catch); Kubota & Quanbunchan 1965 (Callorhinus ursinus; experimental studies of tooth development & means of EDTA-PB subcutaneous injection); Kumlien 1879 (Pusa hispida; natural history of Arctic America; Howgate Polar Expedition, 1877-78); Kupke et al. 1979 (Marine mammals; differences in lipid & lipoprotein concentrations of capillary & venous blood); Kuznetsov 1974 (Tursiops truncatus; methods for investigation of chemoreception), 1979 (Tursiops truncatus; Delphinus delphis; Phocoena phocoena; chemoreception); Lal Mohan 1982 (Tursiops aduncus; Sousa plumbea; note on unborn; S.W. India); Lander 1979 (Callorhinus ursinus; FAO fishery series); Landy 1980 (Marine mammals; Pinnipedia; Cetacea; review on neoplasia), 1981 (Callorhinus ursinus; life table & biomass estimate); Larsen 1971 (Ursus maritimus; capturing, handling & marking; Svalbard); Lavigne 1982 (Pinnipedia; effect of cold on breeding systems); Laws 1953 (Mirounga leonina; growth & age), 1953a (M. leonina; new method of age determination), 1981 (Lobodon carcinophagus; Hydrurga leptonyx; Ommatophoca rossi; M. leonina; M. angustirostris; biology; Antarctic); Leatherwood & Evans 1979 (Cetacea; some recent uses & potentials of radio telemetry in field studies); Leatherwood & Walker 1973 (Lissodelphis borealis; N.E. Pacific; behavior); Leatherwood et al. 1976 (Pinnipedia; N.W. Atlantic guide to identification); Leedar & Bradbury 1971 (Pinnipedia; discontinuous nature of epicuticle on surface of keratin fibers); Lensink 1961 (Delphinapterus leucas; status report); Lentfer 1983 (Ursus maritimus; Alaskan polar bear movements from mark & recovery), 1980 (Ursus maritimus; population characteristics); Ling 1965c (Arctocephalus pusillus; Mirounga leonina; Arctocephalus forsteri; Pagophilus groenlandicus; Odobenus rosmarus; Callorhinus ursinus; functional significance of sweat glands & sebaceous glands), 1966 (M. leonina; skin & hair; facial vibrissae), 1968 (M. leonina; morphology of adult integument); Lockley 1958 (Pinnipedia; marking, 1957); Lockyer 1976 (Cetacea; body weights of some large spp.), 1977 (Balaenoptera borealis; estimates of growth); Loughlin 1977 (Enhydra lutris; activity pattern & grooming behavior; California), 1979 (Enhydra lutris; 24-hour feeding activities using radio-telemetric determination); Lowell & Flanigan 1980 (Pinnipedia; Cetacea; chemoreception); Lowry et al. 1977 (Erignathus barbatus; Pusa hispida; Phoca vitulina; trophic relationships among ice-inhabiting phocids), 1978 (Pusa hispida; Balaena mysticetus; Point Barrow, Alaska); Lowry & Frost 1981 (Odobenus rosmarus; phocids feeding & trophic relationship; E. Bering Sea); Lowry et al. 1982 (Marine mammals; feeding habits, food requirements & status; Bering Sea); Lukhanin 1983 (Tursiops truncatus ponticus; intestinal anatomy); Macintosh & Wheeler 1928 (Balaenoptera musculus; Balaenoptera physalus; reports); MacPherson & Penner 1967 (Pinnipedia; freeze branding for laboratory identification); Manning 1971 (Ursus maritimus; geographic variation); Mansfield 1958 (Odobenus rosmarus; biology; E. Canadian), 1964 (Monodon monoceros; Odobenus rosmarus; present & future research), 1971 (Balaena mysticetus; occurrence in Canadian Arctic waters), 1973 (Odobenus rosmarus; Canada & Greenland), 1977 (Halichoerus grypus; growth & longevity; E. Canada); Mansfield et al. 1975 (Monodon monoceros; E. Canada); Mansfield & Beck 1977 (Halichoerus grypus; E. Canada); Marini & Blair 1971 (Leptonychotes weddelli; Lobodon carcinophagus; survival of histological structure & biochemical constituents of an ancient mummified); Marquette 1977 (Balaena mysticus; 1976 catch by Alaskan Inuit; review of fishery 1973-76; biological summary of spp.); Marquette & Braham 1982 (Eschrichtius robustus; distribution & catch; Alaska); Martin et al. 1971 (Marine mammals; radio-tracking methods in open sea); Mate et al. 1983 (Eschrichtius robustus; new attachment device for radio tagging large whales); Matthews 1958 (Cetacea; biology), 1950b (Halichoerus grypus; natural history including lactation); Mattson & Seeley 1974 (Pinnipedia; simple clinical temperature telemetry system); Mawdesley-Thomas 1974 (Marine mammals; aspects of neoplasia); Mawdesley-Thomas & Bonner 1970 (Halichoerus grypus; uterine tumors); McCleneghan & Ames 1976 (Enhydra lutris; unique method of prey capture); McCleneghan & McRoy 1979 (Marine mammals; food-web structure & fractionation of carbon isotopes in Bering Sea); McKay 1970 (Marine mammals; biomedical telemetry); McLaren 1955c (Pusa hispida; aging), 1958a (P. hispida; biology, Canadian E. Arctic), 1962 (Pinnipedia; population dynamics & exploitation; Canadian E. Arctic); McLaren & Mansfield 1960 (Marine mammals; netting); Medway 1983 (Cetacea; evaluation of safety & usefulness of biopsy techniques for free-swimmers); Medway et al. 1966 (Cetacea; clinical jaundice in a dolphin); Mercer 1973 (Cetacea; Odontoceti; distribution & intraspecific variation in pigmentation; N.W. Atlantic); Merdsoy et al. 1979 (Monodon monoceros; Halls Bay, Newfoundland); Mermoz 1977 (Tursiops truncatus; stranded in mouth of La Plata River, Buenos Aires, Argentina), 1980 (Balaena sp.; preliminary report; S.W. Atlantic); Millard et al. 1980 (Pinnipedia; coronary vasoconstriction, a model of vasospasm); Miller 1978

(Callorhinus ursinus; energetics in relation to climate & food resources; Bering Sea); Mitchell 1972 (Cetacea; pigmentation & feeding behavior), 1972a (Balaenoptera physalus; assessment of N.W. Atlantic stocks), 1973 (Cetacea; world status); Mohl 1980 (Marine mammals; noise; Arctic); Montagna & Harrison 1957 (Phoca vitulina; specialization of the skin; enzymes of sebaceous gland); Moore 1977 (Marine mammals; inorganic suspensions in sea & their effect); Morejohn 1973 (Phocoenoides dalli; natural history; N. Pacific Ocean); Morris 1975 (Physeter catodon; lipid structure of spermaceti organ; buoyancy regulator); Mukhametov et al. 1982 (Phoca caspica; sleep & electroencephalographic investigation of sleep); Müller-Wille 1974 (Pusa hispida; oil pollution; Repulse Bay, Naiyaa, N.W.T.; legislation); Murray 1899 (Callorhinus ursinus; experiments in branding & herding; St. Paul I., 1897); Myrick et al. 1983 (Stenella attenuata; Stenella longirostris; estimation of age from teeth); Nagorsen & Stewart 1983 (Kogia simus; stomach content; measurements; pregnancy; Vancouver I.); Nagy & Ronald 1970 (Pagophilus groenlandicus; structure of retina); Naito & Nishiwaki 1975 (Phoca vitulina largha; Phoca kurilensis; ecology & morphology in S. Sea of Okhotsk & N.W. Hokkaido); Neave & Wright 1968 (Phocoena phocoena; seasonal migration; Bay of Fundy); Needham 1980 (Neophoca cinerea; Zalophus californianus; restraint & capure cage); Neira et al. 1982 (Cetacea; guide to identity at sea); Newby 1978 (Phoca vitulina; E. Pacific & Arctic); Nicol 1967 (Marine mammals; biology); Nikitenko 1963 (Delphinus delphis; weight of various parts of brain; morphology); Nishiwaki & Tobayama 1982 (Tursiops gilli; Pseudorca crassidens; morphological study; fetal growth); Nishiwaki et al. 1966 (Cetacea; dolphin marking, preliminary experiments); Nores & Perez 1982 (Globicephala melaena; mass stranding; Cantabrian coasts, N. Spain); Norris et al. 1974 (Leptonychotes weddelli; Eumetopias jubata; new tagging & tracking methods); Norris & Harvey 1972 (Physeter catodon; theory for function of spermaceti organ); Norris & Pryor 1970 (Cetacea; tagging method of smaller spp.); Norris et al. 1982 (Eschrichtius robustus; lagoon entrance & other aggregations); Nyholm 1975 (Odobenus rosmarus; observation; Spitsbergen, 1971/72); Okada et al. 1953 (Balaenoptera physalus; polarographic studies on smell of whale); Olsson 1983 (Special topic; environmental specimen bank; Swedish Museum of Natural History; methods); Omura & Sakiura 1956 (Cetacea; little piked whale; studies); Omura 1950 (Physeter catodon; Balaenoptera physalus; on body weight; Japan); Oritsland 1970a (Pinnipedia; sealing & seal research in S.W. Atlantic pack ice, September-October 1964), 1971 (Pagophilus groenlandicus; status of Norwegian studies; Newfoundland), 1971a (Pagophilus groenlandicus; progress report on Norwegian studies; Newfoundland); Orr 1972 (Marine mammals; California); Osipova 1974 (Pagophilus groenlandicus; methods of detecting lipofuscin); Palmisano & Estes 1977 (Enhydra lutris; ecological interactions; Amchitka I., Alaska); Palo 1972 (Orcinus orca; notes on natural history; Washington); Palumbo et al. 1971 (Pinnipedia; sea lions; haematology; blood collection); Parry 1949 (Cetacea; structure of blubber & its properties); Parsons 1977 (Pusa hispida; metabolic studies); Pastukhov et al. 1969 (Pusa siberica; age & weight characteristics of sculpins forming the food); Patten & Saruba 1979 (Zalophus californianus; Phoca vitulina; Callorhinus ursinus; Mirounga angustirostris; strandings; California); Pearse 1975 (Enhydra lutris; habitat; California); Peel 1975 (Lobodon carcinohagus; organochlorine residues in Antarctic snow); Perkins & Miller 1983 (Steno bredanensis; mass strandings at Belize); Perrin et al. 1979 (Stenella sp.; tagging operation & results in tropical E. Pacific); Perrin & Hubbs 1969 (Feresa attenuata; observations; tropical E. Pacific Ocean); Perrin & Myrick 1979 (Cetacea; Odontoceti; workshop on age determination); Pierce 1970 (Marine mammals; design & operation of metabolic chamber); Pilleri 1966 (Megaptera novaeangliae; brain lipoma); Pilson 1970b (Globicephala melaena; tears); Poulter 1965a (Pinnipedia; derivation of simple equation for determination of weight of seal & sea lion from measurements of length & girth); Prathap et al. 1966 (Pinnipedia; spontaneous arterial lesions; Antarctic); Prato et al. 1974 (Zalophus californianus; Callorhinus ursinus; serological evidence for calicivirus transmission between marine & terrestrial mammals); Prosser & Brown 1971 (Marine mammal; comparative physiology); Provancha et al. 1982 (Tursiops truncatus; capture marking & resighting of free-ranging; Indian River lagoon system, Florida); Pugh 1959 (Leptonychotes weddelli; carbon monoxide content of blood & other observations); Raduan & Raga 1982 (Stenella coeruleoalba; beaching Valencia region, Spain); Raga et al. 1982 (Stenella coeruleoalba; Grampus griseus; Globicephala melaena; Ziphius cavirostris; Physeter macrocephalus; Balaenoptera physalus; stranded on Spanish Mediterranean coast); Ray 1970 (Pinnipedia; population ecology), Ray et al. 1978 (Balaenoptera physalus; radio tracking); Ray & Fay 1968 (Odobenus rosmarus; influence of climate on distribution; evidence from physiological characteristics); Ray et al. 1982 (Erignathus barbatus; past & present distribution in N. Atlantic); Razumovskii 1933 (Pinnipedia; spring trapping); Reeves 1980 (Balaena mysticetus; Spitzbergen stock; short review); Reid 1976 (Hydrurga leptonyx; care & handling in captivity); Reijnders 1976 (Phoca vitulina; population size & composition; Dutch Wadden Sea); Reijnders & Wolff 1981 (Phoca vitulina; Halichoerus grypus; Phocoena phocoena; Tursiops truncatus; life history, population dynamics & disease); Reilly et al. 1983 (Eschrichtius robustus; population assessment California; shore census 1967-80; seasonal migration); Renouf et al. 1983 (Phoca vitulina; mother-pup attachment); Rewell & Willis 1949 (Balaenoptera musculus; Balaenoptera physalus; papilloma on tongue & ovary), 1950 (Marine mammals; tumors); Rice 1974 (Cetacea; research in N.E. Pacific), 1977 (Balaenoptera borealis; Balaenoptera brydei; synopsis of biological data; N.E. Pacific), 1978 (Eschrichtius robustus; general); Rice & Scheffer 1968 (Marine mammals; bibliography; world list); Rice & Wolman 1971 (Eschrichtius robustus; life history & ecology); Ridgway 1968 (Tursiops truncatus; biomedical experimentation), 1970 (Pinnipedia; veterinarian & marine research), 1972a (Marine mammals; care; biology & medicine), 1979 (Orcinus orca; reported census of death); Ridgway et al. 1975 (Pinnipedia; diseases); Ridgway & Flanigan 1981 (Cetacea; Pinnipedia; humane method of killing); Ridgway & Howard 1979 (Cetacea; dolphin; lung collapse &

intramuscular circulation during free diving; evidence for N_2 washouts); Ridgway & Johnson 1966 (Cetacea; blood O_2 & ecology); Ridgway & Simpson 1969 (Zalophus californianus; anaesthesia & restraint); Risebrough 1978 (Marine mammals; bibliography; pollutants; literature review & research recommendation); Roberts et al. 1963 (Cetacea; arteriosclerosis), 1964 (Cetacea; nutrition; lipids; atherosclerosis), 1965 (Cetacea; spontaneous atherosclerosis in Pacific toothed & baleen whales); Robineau & Rose 1983 (Stenella longirostris; Gulf of Aden waters of Djibouti Indian Ocean; pigmentation); Roff & Bowen 1983 (Pagophilus groenlandicus; population dynamics); Ronald et al. 1970 (Pagophilus groenlandicus; methods of handling molt & disease in captivity); Ross 1974 (Balaena mysticetus; distribution, migration & depletion in Hudson Bay, 1860-1915); Rugh & Braham 1979 (Eschrichtius robustus; fall migration; Unimak Pass, Alaska, 1977); Saayman et al. 1972 (Cetacea; S.E. Cape coast of South Africa; observations), 1973 (Tursiops aduncus; diurnal activity cycles in captive & free ranging); Sacher 1974 (Pinnipedia; relation to gestation time to brain weight of placental mammals); Salter 1979 (Odobenus rosmarus; site utilization activity budgets & disturbance responses during terrestrial haul out); Scheffer 1950a (Pinnipedia; growth layers of teeth indicate age), 1952 (Pinnipedia; ecological life history), 1958 (Pinnipedia; Odobenus rosmarus; sea lion; general); Scheffer & Slipp 1944 (Phoca vitulina; Washington); Schenkkan & Purves 1973 (Cetacea; Odontoceti; Physeteridae; anatomy of nasal tract & function of spermaceti organ); Schroeder & Wegeforth 1935 (Marine mammals; occurrence of gastric ulcers, etiology & pathology; California); Schreiber 1976 (Pinnipedia; cytological studies); Schultz 1938 (Cetacea; can weight be calculated?); Schusterman & Gentry 1971 (Zalophus californianus; fatted-male phenomena); Schweinsburg et al. 1981 (Ursus maritimus; abundance, distribution & population structure; central Arctic Islands, N.W.T.), 1982 (Ursus maritimus; distribution movements & abundance; Lancaster Sound, N.W.T.); Scoresby 1820 (Balaena mysticetus; account of Arctic regions; history & description of northern fishery); Seaman & Burns 1981 (Delphinapterus leucas; recent results on studies in Alaskan waters); Seidel 1980 (Ursus maritimus); puncture technique & processing method in obtaining blood); Sekerak et al. 1979 (Marine mammal; plankton studies around Baffin I., July-October 1978); Sergeant 1959 (Pagophilus groenlandicus; sustainable catch; N.W. Atlantic), 1961 (Cetacea; E. Canada), 1962 (Delphinapterus leucas; biology; hunting; Canadian Arctic), 1962a (Globicephala melaena; biology; Newfoundland), 1963 (Pagophilus groenlandicus; sealing industry), 1963a (Balaenoptera acutorostrata; N.W. Atlantic), 1965 (Pagophilus groenlandicus; migration; N.W. Atlantic), 1966 (Balaenoptera physalus; populations; N.W. Atlantic); 1973a (Pagophilus groenlandicus; feeding, growth & productivity; N.W. Atlantic), 1973b (Delphinapterus leucas; biology; W. Hudson Bay), 1976 (Pagophilus groenlandicus; Cystophora cristata; history & present status of populations), 1976a (Pagophilus groenlandicus; N.W. Atlantic population), 1978 (Cetacea; ecological isolation), 1982 (Globicephala melaena; Lagenorhynchus acutus; Physeter catodon; Globicephala spp.; Pseudorca crassidens; Tursiops truncatus; Phocoena phocoena; Balaenoptera acutorostrata; Megaptera novaeangliae; mass stranding); Sergeant et al. 1973 (Tursiops truncatus; age, growth & maturity; N.E. Florida); Sergeant & Brodie 1969a (Delphinapterus leucas; body size), 1969b (D. leucas; tagging; Canadian Arctic), 1975 (D. leucas; identity, abundance & present status of populations in N. America), Sergeant & Fisher 1957 (Cetacea; smaller; E. Canada), 1960 (Pagophilus groenlandicus; population in N.W. Alaska; 1950-60); Sergeant & Hoek 1976 (Delphinapterus leucas; Balaena mysticetus; seasonal distribution in E. Beaufort Sea), 1974 (Cytophora cristata; Pagophilus groenlandicus; tagging & branding, 1971-1974); Sergeant et al. 1970 (Cetacea; inshore records for E. Canada); Shustov 1970 (Pusa hispida; daily dynamics of rookeries); Sigel 1972 (Cetacea; virological studies of dolphins); Silverman 1979 (Monodon monoceros; social organization & behaviour; Lancaster Sound, Pond Inlet & Tremblay Sound, N.W.T.); Simpson 1945 (Marine mammals; principles of classification & classification); Simpson & Gardner 1972 (Marine mammals; comparative microscopic anatomy of selected mammals); Sinclair 1981 (Pinnipedia; Inuit; diet; importance of essential fatty acids); Siniff 1981 (Pinnipedia; seal population, dynamics & ecology); Siniff et al. 1981 (Hydrurga leptonyx; aspects in Antarctic Peninsula pack ice), 1977 (Leptonychotes weddelli; analysis of dynamics of population); Siversten 1941 (Pagophilus groenlandicus; biology); Skinder & Mead 1979 (Pinnipedia; Cetacea; problems & solutions; on site of strandings); Sleet et al. 1981 (Physeter catodon; estimate of total blood volume & total body weight); Sleptsov 1961c (Balaenoptera physalus; Orcinus orca; Berardius bairdi; Physeter catodon; results from weighing various sizes captured in Far East); Slijper 1948 (Balaenoptera musculus; Balaenoptera physalus; lipid; thickness of blubber), 1954 (Cetacea; importance of measuring thickness of layer of blubber), 1958 (Cetacea; Phoca vitulina; organ weights & symmetry problems of seals & porpoises), 1962 (Cetacea; book); Smith 1966b (Halichoerus grypus; mother-young relations), 1968 (H. grypus; adaptive suckling), 1973a (Pusa hispida; population dynamics; Canadian E. Arctic), 1973b (P. hispida; management research), 1975 (P. hispida; James Bay & Hudson Bay, population estimates & catch statistics), 1976 (P. hispida; predation by Arctic fox), 1980 (Ursus maritimus; P. hispida; Erignathus barbatus; predation on ringed & bearded seals; fast sea ice habitat); Smith et al. 1976 (Zalophus californianus; Callorhinus ursinus; 4 serotypes of San Miguel sea lion serum virus); 1983a (Odobenus rosmarus; new calicivirus isolates from feces; Pribilof I., Alaska); Smith & Gaskin 1983 (Phocoena phocoena; environmental index for habitat use by female with calves near Deer I., Bay of Fundy, Canada); Smith & Hammell 1980 (Pusa hispida; survey of breeding habitat & behaviour during spring haul-out period in S.E. Baffin I., Canada), 1981 (Pusa hispida; Leptonychotes weddelli; ecology in its fast ice breeding habitat); Smith & Rigby 1981 (Marine mammal; distribution of polynyas in Canadian Arctic); Smith & Stirling 1975 (Pusa hispida; breeding habitat, birth lair & associated structures); Smith 1983 (Stenella attenuata; Stenella longirostris; change in size of population), 1975a (Pusa hispida; parameters & dynamics in

Canadian E. Arctic), 1978 (P. hispida; variation in density of seal birth lair; Amundsen Gulf, N.W.T.); Smith et al. 1973 (Pusa hispida; capture, handling & branding), 1979 (Marine mammals; studies in S.E. Baffin I.); Sobolevskii 1982 (Phoca vitulina insularis; distribution, numbers & ecological features); Sokolov 1959 (Pinnipedia; structure of cutaneous integument); Sokolov et al. 1966 (Pinnipedia; internal organ weights; Bering Sea); Solianek 1964 (Pinnipeda; experiments in marking from small ships); Spearman 1968 (Mirounga leonina; histology of epidermis during the telogen stage of hair growth); Spencer 1959 (Inuit; ecology & society); Stedman et al. 1976 (Callorhinus ursinus; lymphosarcoma; infant), 1977 (Callorhinus ursinus; lymphosarcoma; infant); Steiner et al. 1979 (Orcinus orca; vocalization & feeding behaviour); Stewart & Lavigne 1979 (Pagophilus groenlandicus; age determination workshop; N.W. Atlantic); Stewart et al. 1981 (Pagophilus groenlandicus; parturition); Stirling 1966a (Leptonychotes weddelli; techniques in handling live), 1966b (Leptonychotes weddelli; marking; McMurdo Sound, Antarctica), 1967 (Leptonychotes weddelli; population studies); Stirling 1969 (Leptonychotes weddelli; ecology; McMurdo Sound, Antarctica), 1971 (Leptonychotes weddelli; population dynamics; McMurdo Sound, Antarctica, 1966-68), 1971a (Leptonychotes weddelli; sex ratio of newborn during pupping season), 1971b (Arctocephallus forsteri; behavior), 1973 (Pusa hispida; vocalization), 1977 (P. hispida; Leptonychotes weddelli; adaptation to exploit polar fast-ice habitat in presence or absence of land predators), 1980 (Marine mammals; biological importance of polynyas; Canadian Arctic); Stirling et al. 1975 (Ursus maritimus; distribution & abundance; E. Beaufort Sea), 1975a (U. maritimus; research in Beaufort Sea), 1977a (Pinnipedia; distribution & abundance; E. Beaufort Sea), 1980 (U. maritimus; population ecology study; S.E. Baffin I.), 1981 (U. maritimus; habitat preferences & distribution; W. Canadian Arctic); Stirling & Calvert 1983 (Marine mammals; environmental threats; Canadian Arctic); Stirling & Cleator 1981 (Marine mammals; polynyas in Canadian Arctic); Stirling et al. 1977b (Ursus maritimus; ecology; along W. coast of Hudson Bay), 1981a (Marine mammals; polynyas); Stirling & Jonkel 1972 (Ursus maritimus; general); Stirling & Kiliaan 1980 (Ursus maritimus; population ecology studies; N. Labrador); Stirling et al. 1982 (Pinnipedia; distribution & abundance; E. Beaufort Sea), 1976 (Ursus sp.; grizzly bear; population ecology in N. Canada), 1978 (Ursus maritimus; population ecology along proposed Arctic Island gas pipeline route); Stirling & Smith 1977 (Marine mammals; interrelationships of Arctic Ocean mammals in sea ice-habitat); Stolk 1950 (Balaenoptera physalus; Balaenoptera musculus; tumor), 1952 (Cetacea; tumor), 1953a (Cetacea; inflammation), 1953b (B. musculus; hepatic cirrhosis), 1953c (Cetacea; tumors), 1954a (Cetacea; inflammation), 1954b (B. musculus; hepatic cirrhosis), 1962 (Cetacea; tumor); Stone et al. 1973 (Zalophus californianus; renal blood flow in a diving trained); Stout 1969 (Pinnipedia; atherosclerosis); Stoyanov 1971 (Cetacea; histochemical & ultrastructural changes in lungs of porpoise immunized with corpuscular & dissolved antigens); Stroud 1975 (Phoca vitulina; nephrolithiasis in adults); Stroud & Roffe 1979 (Cetacea; Phoca vitulina; Eumetopias jubata; Zalophus californianus; Mirounga angustirostris; causes of death in those stranded along Oregon coast); Stroud & Stevens 1980 (Zalophus californianus; Callorhinus ursinus; Phoca vitulina; lymphosarcoma); Stroud et al. 1979 (Pinnipedia; Cetacea; causes of death; Oregon & Washington); Stulken & Kirkpatrick 1955 (Enhydra lutris; physiological investigation of mortality in captivity); Sumich 1983 (Eschrichtius robustus; cost of locomotion in migration); Sweeney 1973 (Pinnipedia; management of disease), 1974 (Pinnipedia; common diseases); Sweeney & Geraci 1979 (Pinnipedia; medical care of strandings); Sweeney & Mattsson 1974 (Eschrichtius robustus; surgical attachment of telemetry device to dorsal ridge of yearling); Sweeney & Ridgway 1975 (Cetacea; procedures for clinical management of small spp.), 1975a (Cetacea; common diseases); Tarasevich 1974 (Delphinapterus leucas; characteristics of migration towards coasts); Tarasoff 1974 (Enhydra lutris; Pagophilus groenlandicus; anatomical adaptations to thermal regulation); Tedman & Bryden 1979 (Leptonychotes weddelli; cow-pup behaviour; McMurdo Sound, Antarctica); Testa et al. 1981 (Leptonychotes weddelli; population dynamics in E. McMurdo Sound, Antarctica); Thobro 1973 (Pinnipedia; seal tagging; N. Atlantic waters 1967-72); Thomas & De Master 1983 (Leptonychotes weddelli; parameters affecting survival of pups to weaning); Thomas et al. 1980 (Leptonychotes weddelli; satellite tracking & automatic position/activity monitoring techniques for Antarctic cod & seal), 1983 (L. weddelli; analysis of vocalization using under water polygraph); Thompson 1978 (Mirounga angustirostris; Zalophus californianus; California marine mammal center); Thompson & Friedl 1982 (Megaptera novaeangliae; Balaenoptera physalus; Balaenoptera musculus; Physeter macrocephalus; Globicephala macrorhyncha; long-term study of low-frequency sounds of Oahu, Hawaii, seasonal migration & distribution); Tillman 1980 (Balaena mysticetus; scientific perspective); Tomilin 1957 (Cetacea; mammals of USSR & adjacent countries); Tomilin et al. 1982 (Cetacea; new nontraumatic method of tagging small spp.); Townsend 1935 (Balaena mysticetus; Megaptera nodosa; Balaena sieboldii; Balaena australis; distribution as shown by log-book records of American whaling ships); Urmanov 1971 (Callorhinus ursinus; Eumetopias jubata; Phoca largha; Histriophoca fasciata; Erignathus barbatus; Enhydra lutris; angioarchitectonics of liver with reference to gall-excretion system); U.S. Fish & Wildlife Service n.d. (Pinnipedia; outfit for capturing); Usher & Church 1969a (Pusa hispida; relationship of weight, length & girth; Canadian Arctic), 1969b (Pusa hispida; field tables for calculation of weights from length & girth measurements); Uspenski & Belikov 1976 (Ursus maritimus; research in USSR); Uspenski & Kupriyanov 1980 (Ursus maritimus; research & conservation in USSR, 1975-76); Vague & Fenasse (Marine mammals; handbook on physiology of adipose); Van Haaften 1962 (Pinnipedia; diseases in Dutch coastal waters), Viale 1981 (Cetacea; lung pathology in stranded Mediterranean coasts); Vladykow 1944 (Dephinapterus leucas; hunting & biology; Gulf of St. Lawrence); Vogl & Fisher 1982 (Monodon monoceros; Delphinapterus leucas; arterial retia related to supply of central nervous system); Vladimirtseva et al. 1981 (Balaenoptera mus-

culus; influenza a virus; antigenically similar to human); Votrogov & Bogoslovaskaya 1980 (Eschrichtius robustus; Chukotka Peninsula); Wartzok et al. 1975 (Marine mammals; recording instrument package); Wasserman & McKenzie 1956 (Phoca vitulina; cardiac output, plasma volume & circulation time studies during the dive reflex); Watkins 1981 (Balaenoptera physalus; activities & underwater sounds); Watkins et al. 1980 (Cetacea; radio tag); Watson 1981 (Cetacea; bibliography; sea guide to world's whales); Watson & Gaskin 1983 (Ocinus orca; Phocoena phocoena; ventilation cycle; Bay of Fundy); Watt 1952 (Halichoerus grypus; experiments in marking); Webster et al. 1981 (Phoca vitulina; influenza virus characterization); Wheeler 1929 (Balaenoptera musculus; Balaenoptera physalus; changes in the condition of blubber); Whitehead 1983 (Megaptera novaengliae; structures & stability of groups off Newfoundland); Whitehead & Moore 1982 (Megaptera novaeangliae; distribution & movements in winter); Whitehead et al. 1982 (Megaptera novaeangliae; migration along N.E. coast of Newfoundland); Wilber 1952 (Callorhinus ursinus; blubber); William & Siniff 1983 (Enhydra lutris; surgical implantation of radio-telemetry devices); Winters 1978 (Pagophilus groenlandicus; production, mortality & sustainable yield; N.W. Atlantic); Woodhouse et al. 1979 (Zalophus californianus; Phoca vitulina; mirounga angustirostris; strandings); Würsig 1976 (Lagenorhynchus obscurus; radio-tracking); Würsig & Würsig 1977 (Tursiops truncatus; photographic determination of group's composition & stability of coastal porpoise), 1979 (Tursiops truncatus; behavior & ecology; S. Atlantic); Xu et al. 1983 (Balaenoptera davidsoni; Balaenoptera acutorostrata; eat Ammodytes personatus & Euphausia pacifica; body length & embryo length); Young 1976 (Marine mammals; fat, energy & survival); Zhirmunskii et al. 1980 (Pinnipedia; Soviet-American Symposium; biochemistry & physiology); Zimushko & Ivashin 1980 (Eschrichtius robustus; whaling); Zubchenko 1977 (Pinnipedia; Cetacea; biosorption).

TAXONOMY AND EVOLUTION

Anbinder 1975 (Pinnipedia; Otariidae; karological similarity of sea lions & fur seals), 1975a (Phoca vitulina; Erignathus barbatus; Pusa sibirica; Pusa hispida; Histriophoca fasciata; Pagophilus groenlandicus; karotypes); Anonymous 1972 (Phoca largha; toxicology; biochemical analysis of spp. & populations, adaptation to their environment; Bering Sea); Arnason 1977 (Histriophoca fasciata; Monachus schauinslandi; Odobenus rosmarus; Callorhinus ursinus; Archocephalus pusillus), 1981 (Arctocephalus pusillus; Odobenus rosmarus; Cystophora cristata; Phoca largha; Histriophoca fasciata; localization of nucleolar organizing regions of karotypes); Arnason et al. 1982 (Ziphius cavirostris; Platanista indi; Physeter catodon; Balaena mysticetus; Balaenoptera acutorostrata; Delphinapterus leucas; Balaenoptera borealis; Phocoena phocoena; monophylogenic origin); Bada & Deems 1975 (Pinnipedia; aspartic acid racemization reaction; compare to C-14 dating); Baluda et al. 1972 (Cetacea; electrophoresis of hemoglobins); Banfield 1974 (Marine mammals; Canadian list); Bartholomew 1970 (Pinnipedia; model for evolution of phylogeny); Bartholomew & Boolootian 1960 (Pinnipedia; numbers & population structure; California Channel I.); Bigg 1981 (Phoca vitulina; Phoca largha; handbook); Blanchetot et al. 1983 (Halichoerus grypus; myoglobin gene; an unusually long globin gene; hemoglobin); Bogdanov et al. 1977 (Callorhinus ursinus; biochemical polymorphism transferrin, alkaline phosphatase, haptoglobins, plasma & erythrocyte esterases; N.W. Pacific); Border 1975 (Tursiops truncatus; Globicephala scammoni; Lagenorhynchus obliquidens; Orcinus orca; electrophoretic analysis of hemoglobin); Borisov 1966 (Pagophilus groenlandicus; serological analysis of colonies), 1969a (Cetacea; comparative analysis of serum albumins), 1969b (Ursus arctos; Ursus maritimus; Histriophoca fasciata; Pusa hispida; Cystophora cristata; Odobenus rosmarus; Physeter catodon; Balaenoptera musculus; Balaenoptera physalus; antigenic properties of serum proteins), 1969c (Cetacea; serological analysis; interrelation), 1981a (Physeter catodon; Balaenoptera physalus; Balaenoptera borealis; Physeter macrocephalus; electrophoresis of hemoglobins & myoglobins; Antarctic), 1981b (Balaenoptera acutorostrata; Balaenoptera borealis; Physeter macrocephalus; electrophoresis of lactate dehydrogenase isozymes; blood plasma, corpus luteum, corpus albicans & testes; Antarctic), 1981c (Balaenoptera borealis; Balaenoptera acutorostrata; electrophoresis of haptoglobins; Antarctic); Borruel et al. 1973 (Leptonychotes weddelli; biosynthesis of esteroids by suprarenal gland; example of evolutionary & ecological adaptation); Brown 1976 (Marine mammals; evolution of serum albumin); Burns 1981 (Halichoerus grypus; handbook), 1981a (Erignathus barbatus); Case 1978 (Pinnipedia; Cetacea; evolution & adaptive significance of post-natal growth rates); Chauvet et al. 1978 (Balaenoptera physalus; phylogeny of neurophysins; complete amino acid sequence of MSEL-neurophysin); Chernoivanov & Bogdanov 1979 (Callorhinus ursinus; inherited polymorphism in relation to blood serum peroxidase); Chiarelli & Capanna 1973 (Marine mammals; cytotaxonomy & vertebrate evolution); Clements et al. 1970 (Pinnipedia; Otariidae; pulmonary suriactants & evolution of lungs); Colonna et al. 1978 (Physeter sp.; evolution on homologous proteins; apomyoglobins); Crawley & Brown 1971 (Arctocephalus forsteri; measurements of tagged pups & population estimates; Taumaka Open Bay I., Westland, New Zealand); Cushing 1961 (Callorhinus ursinus; blood typing), 1963 (Cetacea; blood groups & systematics), 1964 (Marine mammals; blood groups); Cushing et al. 1963 (Physeter sp.; JU blood-typing system and of specific soluble substances); Dhindsa et al. 1974 (Orcinus orca; Delphinapterus leucas; respiratory function of blood; electrophoresis of hemoglobins); De Jong & Goodman 1982 (Cetacea; Pinnipedia; mammalian phylogeny, studied by sequence analysis of eye lens proteins; α-crystallin); Duffield et al. 1983 (Cetacea; Tursiops sp.; hematology distinguishes coastal & offshore forms of dolphins); Fay 1981 (Odobenus rosmarus; general; handbook); Fedoseev 1982 (Odobenus rosmarus; dynamics of area of distribution & the ecological differentiation of the population); Fisher et al. 1974 (Marine mammals; 32 spp.; erythrocyte inorganic pyrophosphatase isozymes); Fordyce 1982 (Cetacea; Odonticeti; Mysticeti; dental anomaly in a fossil & evolution of polydonty); Fredga 1976 (Pinnipedia; chromosomes); Frost & Lowry 1981a (Pusa hispida; Pusa sibi-

rica; Pusa caspica; handbook); Fujino 1954 (Berardius bairdi; Physeter sp.; blood groups; serological constitution); Fujino & Cushing 1960 (Callorhinus ursinus; blood types); Fujino 1962 (Balaenoptera physalus; pigmy blue whale; blood types; Antarctic); Gallien et al. 1967 (Delphinus delphis; electrophoresis of serum proteins; prealbumin, albumin, transferrin & globulins; 21 fractions), 1970 (Delphinus delphis; Stenella styx; Grampus griseus; Globicephala melaena; immunoelectrophoresis of serum proteins; 21 constituents); Gentry 1981a (Callorhinus ursinus; handbook); Goodman et al. 1965 (Phoca vitulina; Darwinian evolution in the genealogy of hemoglobins); Guderley & Bouchard 1982 (Pusa hispida; electrophoresis of isozymes of pyruvate kinase in muscle & heart); Heu 1977 (Cystophora cristata; Erignathus barbatus; Halichoerus grypus; Phoca vitulina; Pusa hispida; Pusa sibirica; Pusa caspica; Histriophoca fasciata; Pagophilus groenlandicus); 1981a (Leptonychotes weddelli; handbook); Horvath et al. 1968 (Zalophus californianus; Cetacea; 4 spp. of porpoises; respiratory & electrophoretic characteristics of hemoglobin); Iablokov 1974 (Pinnipedia; microevolutionary study); Kendrew et al. 1954 (Phoca vitulina; Cetacea; Physeter catodon; Balaenoptera musculus; Balaenoptera physalus; Balaenoptera borealis; Balaenoptera acutorostrata; porpoise; spp. specificity of myoglobins); King 1983 (Pinnipedia); Kooyman 1981 (Hydrurga leptonyx; handbook), 1981b (Lobodon carcinophagus; handbook); Kulu 1972 (Marine mammals; evolution & cytogenetics); Lavigne et al. 1978 (Pagophilus groenlandicus; genetic variability; N.W. Atlantic); Leone & Wiens 1956 (Callorhinus ursinus; comparative serology); Lidicker et al. 1981 (Eumetopias jubata; biochemical variations in tissues; electrophoresis of 32 loci); Lincoln et al. 1973 (Phoca vitulina; Histriophoca fasciatus; Halichoerus grypus; Odobenus rosmarus; Zalophus californianus; Callorhinus ursinus; Mirounga angustirostris; hemoglobins); Litchfield 1973 (Cetacea; taxonomic patterns in triglyceride structure of natural fats); Litchfield & Greenberg 1974 (Berardius bairdi; Delphinapterus leucas; Delphinus delphis; Globicephala melaena; Grampus griseus; Inia geoffrensis; Kogia simus; Lagenorhynchus albirostris; Monodon monoceros; Phocoena phocoena; Phocoenoides dalli; Platanista gangetica; Pseudorca crassidens; Stenella plagiodon; Tursiops truncatus; comparative lipid patterns in melon fats); Manski et al. 1964 (Cetacea; immunochemical analysis of phylogeny of lens proteins); Mayr 1963 (Marine mammals; animal spp. & evolution); McLaren 1966 (Phoca vitulina; taxonomy & evolution in N.W. Pacific hair seals); Mednikov & Shubina 1976 (Balaenoptera physalus; Physeter catodon; Balaenoptera borealis; role of transcription promoters sites in microevolutionary processes); Meuth et al. 1981 (Orcinus orca; phylogenetic relation of myoglobin); Miller 1974 (Enhydra lutris; bibliography; review of taxonomic status, life history & some ecological interactions); Moller et al. 1966 (Cystophora cristata; Pagophilus groenlandicus; Erignathus barbitus; Pusa hispida; blood analysis & populations); Myhre et al. 1969 (Tursiops truncatus; blood groups); Naevdal 1965 (Pagophilus groenlandicus; protein polymorphism used for identification of populations), 1966 (Pagophilus groenlandicus; Cystophora cristata; Pusa hispida; Erignathus barbatus; hemoglobin & serum protein electrophoresis; N. Atlantic), 1969 (Pagophilus groenlandicus; blood protein polymorphism, E. Canada), 1971 (Marine mammals; serological studies); Norris 1968 (Cetacea; Odontoceti; evolution of acoustic mechanisms); Numachi 1970 (Marine mammals; lactate & malate dehydrogenase isozyme patterns); Olsson 1980 (Pusa caspica; Pagophilus groenlandicus; Pusa hispida; Phoca sp.; Odobenus rosmarus; carbon-14 content; N. Europe); Pauly & Wolfe 1957 (Eumetopias jubata; Zalophus californianus; Odobenus rosmarus; Phoca vitulina; serological relationships among Carnivora); Peak et al. 1971 (Leptonychotes weddelli; Arctocephalus pusillus; lactate dehydrogenase isozymes); Perks 1977 (Callorhinus ursinus; neurohypophysis; developmental & evolutionary aspects); Pierotti 1980 (Pinnipedia; Phocidae; Otariidae; effects of cold climate on evolution of the breeding systems); Pilleri & Gihr 1975 (Neophocoena phocoenoides; Neophocoena asiaeorientalis; Neophocoena sunamari; taxonomy & ecology); Pilleri et al. 1982a (Delphinapterus leucas; Neophocoena phocoena; Monodon monoceros; osteological consideration in shape of sonar field; melon); Repenning 1975 (Pinnipedia; Odobenidae; Otariidae; evolution), 1976 (Odobenus rosmarus; sea lions; adaptive evolution); Rice 1977a (Pinnipedia; world list); Ridgway & Harrison 1981 (Pinnipedia; Otariidae; Odobenidae), 1981a (Pinnipedia; Phocidae; handbook); Romero-Herrera et al. 1973 (Phoca vitulina; molecular evolution of myoglobin & fossil records; a phylogenetic synthesis); Rumen 1959 (Phoca vitulina; isolation of 5 myoglobins); Sarich 1969a (Zalophus californianus; Phoca vitulina; origins & rate of evolution of pinnipeds), 1969b (Pinnipedia; Odobenus rosmarus; Phocidae; Otariidae; phylogeny), 1972 (Odobenus rosmarus; Phoca vitulina; Callorhinus ursinus; nonidentity of several carnivore hemoglobins); Seal 1969 (Marine mammals; Carnivora systematics; hemoglobin study); Seal et al. 1971a (Lobodon carcinophagus; Leptonychotes weddelli; Mirounga leonina; blood chemistry & protein polymorphism), 1971b (Lobodon carcinophagus; biochemical population genetic, phylogentic & cytological studies; Antarctic spp.); Selander & Johnson 1973 (Marine mammals; genetic variations among spp.); Shaughnessy 1968 (Phoca vitulina; genetic studies in subantarctic & Antarctic), 1969 (Leptonychotes weddelli; transferrin polymorphism & population structure), 1970 (Pinnipedia; Otariidae; Arctocephalus spp.; serum protein variations), 1971 (Phoca vitulina largha; P.v. richardii; biochemical comparison of pagophilic & pagophobic seals), 1974 (Mirounga leonina; electrophoresis of blood & milk proteins), 1975a (Phoca vitulina; biochemical identification), 1975b (Phoca vitulina; Phoca largha; biochemical comparison; electrophoresis of lactate dehydrogenase & hemoglobin); Shaughnessy & Fay 1977 (Pusa vitulina; nomenclature; review); Shoubridge et al. 1976 (Balaenoptera physalus; Balaenoptera borealis; Balaenoptera musculus; Megaptera novaeanglíae; Physeter catodon; LDH isozyme patterns; biochemical adaptation to diving); Simonsen et al. 1982a (Pusa hispida; Pagophilus groenlandicus; Cystphora cristata; electrophoretic variations; polymorphism of enzymes in liver & muscle), 1982b (Odobenus rosmarus; electrophoretic variation; liver, blood & muscle enzymes (21); albumin, proalbumin & transferrin; polymorphism; Thule, N. Greenland); Smith & Joule 1981 (Pinnipedia; population dynamics;

book); Stirling 1982 (Pinnipedia; evolution of mating systems); Stirling & Warneke 1971 (Arctocephalus spp.; vocalization, compare on basis of evolution & present taxonomy); Viswanadhan & Sundaram 1983 (Physeter sp.; specificity of spatial clustering of amino acid residues as evolutionary trends in proteins); Wallis 1981 (Marine mammals; molecular evolution of pituitary growth hormone, prolactin & placental lactogen; variable rates of evolution of proteins); Whittow 1973 (Marine mammals; evolution of thermoregulation); Williams et al. 1977 (Tursiops truncatus; fatty composition closer to land mammals).

THERMOREGULATION

Adolph 1951 (Marine mammals; responses to low temperatures between warm blooded & cold blooded vertebrates); Behrisch 1973 (Marine mammals; molecular mechanisms of temperature adaptation in Arctic ectotherms & heterotherms); Behrisch & Elsner 1980a (Phoca vitulina; liver & kidney cortex fructose 1,6-diphosphatase in a diver; molecular mechanism of regulation of temperature), 1980b (Phoca vitulina richardsi; molecular adaptations to diving habitat; role of glycerol in ischemic kidney; glycerol from triglycerides); Behrisch & Percy 1974 (Phoca vitulina; temperature & regulation of enzyme activity in homeo- & heterothermic tissues; regulatory properties of 1,6-diphosphogluconate dehydrogenase in adipose); Belkovitch 1965 (Marine mammals); Bigg 1981 (Phoca largha; Phoca vitulina; handbook); Blix et al. 1979 (Pagophilus groenlandicus; temperature regulation in newborn pups on ice; thermogenic adipose), 1975 (Pinnipedia; temperature effect on lactate dehydrogenase activity of skin), 1979 (Callorhinus ursinus; newborn suffer from cold?); Blix & Steen 1979 (Odobenus rosmarus; Leptonychotes weddelli; Erignathus barbatus; Cystophora cristata; Pagophilus groenlandicus; Callorhinus ursinus; Pusa hispida; Phoca largha; Phoca vitulina; newborns; review); Blix & Grov 1979 (Callorhinus ursinus; nonshivering thermogenesis in skeletal muscle); Bryden 1964 (Mirounga leonina; insulating capacity of subcutaneous fat), 1968c (M. leonina; growth & function of subcutaneous fat); Costa & Kooyman 1982 (Enhydra lutris; oxygen consumption & thermoregulation & effect of fur oiling & washing); Davydov & Makarova 1965 (Pinnipedia; changes in heat regulation & circulation of newborn on transition to aquatic form of life); Engelhardt 1983 (Marine mammals; Cetacea; Pinnipedia; Ursus maritimus; Enhydra lutris; toxic compounds; oil spill on thermoregulation, dermal, neural & renal toxicities); Elsner et al. 1977a (Leptonychotes weddelli; temperature regulation in newborn); Engelhardt & Ferguson 1980 (Halichoerus grypus; Pagophilus groenlandicus; adaptive hormone changes during the post-natal period; endocrine regulation for thermoregulation); Feltz & Fay 1966 (Phoca vitulina; Erignathus barbatus; Odobenus rosmarus; Eumetopias jubata; thermal requirements in vitro of epidermal cells); Fisher et al. 1975 (Pusa hispida; Phoca vitulina; temperature on oxygen consumption rates in tissues); Frisch & Oritsland 1968 (Pagophilus groenlandicus; insulative changes during molting); Frisch et al. 1974 (Marine mammals; insulation of furs in water); Frost 1979 (Marine mammals; regulating of nonshivering thermogenesis of brown adipose); Gale 1973 (Marine mammals; bibliography; neuroendocrine aspects of thermoregulation; review); Gallivan 1977 (Pagophilus groenlandicus; temperature regulation & respiration in free swimmers); Gallivan & Ronald 1979 (Pagophilus groenlandicus; temperature regulation in free divers); Gentry 1973 (Pinnipedia; thermoregulating behavior); Grav 1981 (Pagophilus groenlandicus; cellular thermogenesis in brown adipose of newborn; role of mitochondrial respiration & coupling processes & chemeosmosis in thermogenesis in brown adipose); Grav et al. 1974 (Pinnipedia; how do pups survive birth in Arctic winter?); Grav & Blix 1976 (Pagophilus groenlandicus; brown adipose; a factor in pup survival; thermogenically-active mitochondria), 1979 (Callorhinus ursinus; source of nonshivering thermogenesis in skeletal muscle; coupling of mitochondria); Hammond et al. 1971 (Leptonychotes weddelli; thermal regulation in pups), 1972 (Leptonychotes weddelli; temperature regulation & related studies), 1970 (Leptonychotes weddelli; thermal regulation in newborn); Hart 1964 (Marine mammals; insulative & metabolic adaptation to cold); Hart & Fisher 1964 (Marine mammals; Phocidae; Otariidae; Odobenus rosmarus; adaptation to polar environment); Hart & Irving 1959 (Phoca vitulina; energetics in air & in water with seasonal changes); Heath et al. 1977 (Mirounga angustirostris; comparison of thermal regulation of suckling & weaned pups); Hempleman & Lockwood 1978 (Pinnipedia; physiology); Hissa 1980 (Pinnipedia; Cetacea; responses to cold); Hubbard 1968 (Pinnipedia; husbandry & laboratory care); Hull 1966 (Marine mammals; structure & function of brown adipose); Irving 1957 (Marine mammals; usefulness of Scholander's views on adaptive insulation), 1964b (Marine mammals; Arctic), 1967 (Marine mammal; diving), 1968 (Marine mammal; adaptation to cold), 1969 (Marine mammals), 1970 (Marine mammals; morpho-physiological adaption to life in polar areas), 1972 (Marine mammals; Arctic life); Irving & Hart 1957 (Phoca vitulina; Pagophilus groenlandicus; metabolism & insulation as bare-skinned); Irving & Krog 1954 (Marine mammals; body temperature of Arctic & Subarctic mammals), 1955 (Marine mammals; skin temperature as regulator of heat), 1957 (Marine mammals; skin temperature & conservation of heat); Irving et al. 1935b (Marine mammals; metabolism in summer & winter), 1962 (Pinnipedia; fur seal); Iversen & Krog 1973 (Pinnipedia; heat production & body surface area); Jansky 1971 (Marine mammals; participation of body organs during non-shivering heat production); Johansen 1969 (Marine mammals; adaptive response to cold in arterial smooth muscle from heterothermic tissues); Kanwisher & Sundnes 1966a (Cetacea); Kooyman 1981a (Leptonychotes weddelli; growth); Kooyman et al. 1977 (Pinnipedia; Enhydra lutris; thermal conductance of immersed animals before & after oiling with Prudhoe Bay crude); Krogh & Iversen 1968a (Callorhinus ursinus; Eumetopias jubata; Phoca vitulina; Histriophoca fasciata; Odobenus rosmarus; comparative studies of temperature gradients of limbs & blubber), 1968b (C. ursinus; H. fasciata; P. vitulina; E. jubata; O. rosmarus; metabolism); Lavigne 1982 (Pinnipedia; effect of cold on evolution of breeding system); Luecke et al. 1975 (Zalophus californianus; mathematical biothermal model); Matsuura 1972 (Zalophus groenlandicus); Matsuura & Whitton 1973 (Zalo-

phus californianus; Phoca vitulina; oxygen uptake during exposure to heat), 1975 (Z. californianus; thermal insulation during exposure to heat); Mattson & Seeley 1974 (Pinnipedia; simple clinical temperature telemetry system); Matsuura 1972 (Zalophus californianus); McAlister 1981 (Callorhinus ursinus; heat loss & energy consumption); McGinnis 1975 (Pinnipedia; Phocidae; peripheral heat exchange); McGinnis et al. 1970 (Pinnipedia; peripheral heat dissapation), 1975 (Mirounga angustirostris; nursing & weaned pups); McGinnis & Southworth 1967a (Mirounga angustirostris; body temperature fluctuations), 1968 (M. angustirostris; body temperature regulation), 1971 (M. angustirostris); Miller et al. 1972 (Phoca vitulina; metabolism & temperature regulation of newborn & developing), 1976 (P. vitulina; O_2 uptake & temperature regulation); Miller & Irving 1975 (Phoca vitulina; metabolism & temperature regulation); Morrison et al. 1974 (Enhydra lutris; metabolism & thermoregulation); Nedergaard et al. 1983 (Marine mammals; lipid; dietary essential fatty acids on active thermogenin content in brown adipose of rat); Ohata et al. 1977 (Callorhinus ursinus; thermal responses to pelagic conditions), 1977a (C. ursinus; model of energy balance; temperature responses of pups); Ohata & Miller 1976 (Callorhinus ursinus; management based on metabolic & thermoregulatory studies), 1977 (C. ursinus; responses to forced activity on land), 1977a (C. ursinus; temperature responses of pups); Ohata & Whittow 1974 (Zalophus californianus; conductive heat loss to sand); Oritsland 1968 (Pagophilus groenlandicus; variations in body surface temperature), 1970 (Ursus maritimus), 1971b (Pagophilus groenlandicus; wavelength-dependent solar heating), 1974 (Marine mammals; windchill & solar radiation index for homeotherms); Oritsland & Lavigne 1976 (Ursus maritimus; radiative surface temperatures of exercising bears); Oritsland et al. 1978 (Pagophilus groenlandicus; radiative surface temperature); Oritsland & Ronald 1973 (Pagophilus groenlandicus; effect of solar radiation & wind chill on skin temperature), 1977 (Pagophilus groenlandicus; simulation program for heat balance), 1978 (P. groenlandicus; aspects of temperature regulation of pups evaluated in vivo experiments & computer simulations), 1978a (P. groenlandicus; hair transmittance of solar energy); Oritsland & Smith 1975 (Pusa hispida; heat budget & insulation; molt); Patterson 1972 (Phoca vitulina richardii; insulative quality of pelage); Pedersen & Grav 1972 (Marine mammals; lipid; nucleic acids; physiologically induced loose-coupling of brown adipose mitochondria correlated to endogenous fatty acids & adenosine phosphatase); Pierotti 1980 (Pinnipedia; Phocidae; Otariidae; effects of cold climate on evolution of the breeding system); Prosser 1967 (Marine mammal; molecular mechanisms of temperature adaptations); Ray & Fay 1968 (Odobenus rosmarus; influence of climate on distribution); Ray & Smith 1968 (Leptonychotes weddelli; thermoregulation of pups & adults); Ridgway 1972 (Pinnipedia; homeostasis in aquatic environment); Ridgway & Harrison 1981 (Pinnipedia; Otariidae; Odobenidae), 1981a (Pinnipedia; Phocidae; handbook); Scheffer 1952 (Pinnipedia; ecological life history); Scholander et al. 1950 (Phoca vitulina; Cystophora cristata; adaptation to cold in Arctic in relation to body temperature & insulation; basal metabolic rate), 1942b (C. cristata; Halichoerus grypus; P. vitulina; temperature & metabolism during diving), 1950a (Marine mammals; body insulation in Arctic); Scholander & Schevill 1955 (Cetacea; countercurrent heat exchange in the fins); Schmidt-Nielsen 1979 (Pinnipedia; physiology; adaptation to environment); Sinnett et al. 1981 (Phoca vitulina; cardiovascular depression & thermoregulatory disruption caused by pentothal/halothane anaesthesia); Slijper 1958 (Phoca vitulina; organ weights & symmetry problems); Smith & Horwitz 1969 (Marine mammals; brown fat & thermogenesis); Somero & Johansen 1970 (Phoca vitulina; temperature effects on enzymes; lactate dehydrogenase & pyruvate kinase); South et al. 1976 (Zalophus californianus; air temperature & direct partitional calorimetry); Tarasoff 1974 (Enhydra lutris; Pagophilus groenlandicus; anatomical adaptations); Tomilin 1977 (Mirounga angustirostris; Callorhinus ursinus; Phoca vitulina; peri-, semi- & aquatic mammals); Trillmich & Wiesner 1979 (Otaria byronia; immobilization); White & Odell 1971 (Mirounga angustirostris; thermoregulatory behavior); Whittow 1967 (Marine mammals; comparative physiology & thermoregulation; book), 1973 (Marine mammals; evolution of thermoregulation), 1978 (Monachus schauinslandi); Whittow et al. 1972 (Zalophus californianus), 1975 (Zalophus californianus; physiological & behavioral temperature regulation); Zemskii 1958 (Balaenoptera physalus; morphological adaptations in newborn; Antarctic).

TOXIC COMPOUNDS

Addison 1973 (Pusa hispida; Halichoerus grypus; Pagophilus groenlandicus; DDT, PCB & dieldrin in blubber; Canadian Arctic), 1976 (Pinnipedia; organochlorine compounds; distribution, transport to physiological significance), 1982 (Marine mammals; organochlorine compounds & marine lipids); Addison & Brodie 1973 (Delphinapterus leucas; DDT in muscle & liver; MacKenzie Delta), 1977 (Halichoerus grypus; DDT & PCB in maternal blubber & milk and blubber of pups); Addison et al. 1973 (Pagophilus groenlandicus; DDT & metabolites & PCB in blubber; Gulf of St. Lawrence; influence of age); Addison & Smith 1974 (Pusa hispida; PCB & DDT level change in blubber of males & females with age & sex); Addison et al. 1972 (Pagophilus groenlandicus; Cystophora cristata; DDT, PCB & dieldrin in commercial oil; Canada); Aguilar 1983 (Physeter macrocephalus; food intake; DDT, DDD & PCB in blubber; N. Atlantic temperate waters); Aguilar & Jover 1982 (Balaenoptera physalus; PCB & DDT residues; N. Atlantic); Alcorn et al. 1980 (Phoca vitulina; sewage spill; before & after, S. San Francisco Bay); Alzieu & Duguy 1978 (Halichoerus grypus; organochlorine compounds; France), 1979 (Cetacea; Delphinidae; Physeter sp.; Hyperoodontidae; Balaenopteridae; Pinnipedia; Phocidae; Stenella coeruleoalba; Delphinus delphis; Globicephala melaena; PCB, DDT, DDE & DDD in blubber, muscle, liver, kidney, stomach & in newborn); Anas 1970 (Callorhinus ursinus; Hg), 1971 (Callorhinus ursinus; Zalophus californianus; organochlorine pesticides), 1973 (C. ursinus; Hg), 1974a (C. ursinus; Phoca vitulina richardii; Hg, Cd & Pb in unborn; liver, muscle & kidney; varies with age), 1974b (Phoca vitulina; DDT &

PCB in blubber); Anas & Wilson 1970a (Callorhinus ursinus; PCB, dieldrin, DDT & metabolites in unborn pup's blubber & in ingested milk & muscle, brain, liver & blubber of nursing pups), 1970b (C. ursinus; PCB, dieldrin, DDT & metabolites in unborn & adults); Anas & Worlund 1975 (Callorhinus ursinus; PCB & DDT in 8 to 13 year-old adult blubber); Anonymous 1972 (Phoca largha; toxicology; biochemical analysis of spp.; population and adaptation to their environments), 1973 (Pinnipedia; Ursus maritimus; PCB), 1977 (Phoca vitulina; heavy metal & organohalogen investigations, North Sea, Germany); Arima & Nagakura 1979 (Tursiops gilli; Neophocoena phocoenoides; Stenella coeruleoalba; Globicephala melaena; Hg & Se in fetal & adult muscle); Arndt 1973 (Phoca vitulina; DDT & PCB levels in 3 populations; Washington); Aucamp et al. 1971 (Grampus griseus; DDT & dieldrin in liver & blubber; South Africa); Bagge 1975 (Phoca vitulina; Pusa hispida; Halichoerus grypus; pesticide residues; review; Baltic); Baker et al. 1970 (Pagophilus groenlandicus; Sr-90 & Cs-137 in milk), 1981 (Lutra lutra; mortality & marine oil pollution); Ballschmiter & Zell 1980 (Physeter sp.; DDT & metabolites, PCB, polychlorinated camphenes, heptachlor epoxide & hexachlorobenzene); Bartlett & Moulder 1976 (Pinnipedia; Cetacea; marine estuarine pollution; bibliography); Bergman et al. 1981 (Phoca vitulina; PCB in Baltic; reproduction); Birchard et al. 1978 (Odobenus rosmarus; Cystophora cristata; oil spill); Bligh & Armstrong 1971 (Marine mammals; marine Hg pollution; Canada); Blood 1977 (Pusa hispida; Erignathus barbatus; oil spills; Beaufort Sea); Born et al. 1981 (Odobenus rosmarus; Hg, DDT & PCB in muscle, liver & blubber of neonates & female & male adults); Botta et al. 1983 (Pagophilus groenlandicus; total Hg content of meat & liver; Newfoundland); Bowes & Jonkel 1975 (Pusa hispida; Erignathus barbatus; Callorhinus ursinus; Halichoerus grypus; Phoca vitulina; Pagophilus groenlandicus; PCB; food chain in the Arctic & subarctic); Bowes & Lewis 1974 (Pusa hispida; Erignathus barbatus; PCB, DDT & DDE in liver fat; column technique applied to tissue); Bowes et al. 1973 (Zalophus californianus; DDE & PCB in liver & blubber; elevated levels in embryonic death); Braham 1973 (Zalophus californianus; Pb); Brewerton 1969 (Leptonychotes weddelli; DDE & DDT in fats); Brown 1975 (Pinnipedia; impact of Arctic oil & gas development); Buhler 1973 (Pinnipedia; Hg in the western environment); Buhler & Mate 1975 (Zalophus californianus; 14-$CH_3$2O3-Hg; mercuric chloride); Buhler et al. 1975 (Zalophus californianus; Hg, Cd, PCB & DDE in liver & kidney fats); Burrell 1979 (Pinnipedia; heavy metal contents; Bering sea); Caines 1978 (Halichoerus grypus; heavy-metal residues; Farne I., England); Calambokidis et al. 1979 (Phoca vitulina; chlorinated hydrocarbon contaminants); Caldwell & Caldwell 1974 (Pinnipedia; need for studies in E. Gulf of Mexico); Cappon & Smith 1981 (Pinnipedia; Hg & Se content & chemical form in tissues); Clausen 1975 (Erignathus barbatus; Pusa hispida; Cystophora cristata; polychlorinated hydrocarbons in Arctic ecosystems); Clausen et al. 1974 (Ursus maritimus; Erignathus barbatus; Pusa hispida; Phocoena phocoena; lindane, heptachlor epoxide, aldrin, PCB & DDE in adipose tissue); Cook & Baker 1969 (Pagophilus groenlandicus; composition & pesticide residues content of milk); Corner 1975 (Pinnipedia; Cetacea; fossil fuel hydrocarbons; chemical & biochemical properties); Davis & Andersen 1976 (Halichoerus grypus; oil pollution & breeding); De Long et al. 1973 (Zalophus californianus; premature births associated with high DDT & metabolites & PCB in brain, liver & blubber in females & pups); Dobrowolski 1978 (Pusa hispida; DDT in organs & tissues); Donkin et al. 1977 (Halichoerus grypus; PCB & total organochlorine compounds in blubber), 1981 (H. grypus; PCB, DDT, DDE & dieldrin in blubber of male, female & maternal-fetal seals; change with age; Farne I., England); Doutt 1940 (Ursus maritimus; toxicity of liver); Drescher 1976 (Phoca vitulina; organochlorines & heavy metals; North Sea, Germany); Drescher et al. 1977 (Phoca vitulina; organochlorines (PCB, DDT, lindane & dieldrin) & heavy metals (Zn, Cu, Hg, Pb & Cd); vary with animal's age; North Sea, Germany); Duinker et al. 1979 (Phoca vitulina; Cu, Pb, Zn, Cd, PCB, DDT & metabolites in liver, brain, spleen & heart; Dutch Wadden Sea); Duinker & Hillebrand 1979 (Phocoena phocoena; transplacental transfer of PCB, DDT & dieldrin; mobilization of pesticides during pregnancy), 1979a (Pinnipedia; transplacental transfer of organochlorines from female tissue lipids to unborn), 1983 (Marine mammals; Cetacea; porpoise; composition of PCB mixtures in biotic & abiotic marine compartments, Dutch Wadden Sea); Eaton 1980 (Pusa hispida; Hg in liver); Eaton et al. 1980 (Pagophilus groenlandicus; Hg in liver; toxic potential to cats); Engelhardt 1982 (Pusa hispida; metabolism of naphthalene to water-soluble metabolites found in plasma & urine; hydrocarbon hydroxylase in liver & kidney; plasma levels of cortisol); Engelhardt 1978 (Pusa hispida; petroleum hydrocarbon absorption & clearing in blood, kidney, liver & urine; benzene-H-3 & naphthalene-C-14), 1983 (Marine mammals; Cetacea; Pinnipedia; Ursus maritimus; Enhydra lutris; review; oil spill on thermoregulation, dermal toxicity, neurotoxicity & hemotoxicity); Engelhardt et al. 1977 (Pusa hispida; uptake & clearance of petroleum hydrocarbons in blood, plasma, bile & urine; Norman Wells crude); Falconer et al. 1983 (Phocoena phocoena; Zn, Hg, Cd & Cu in liver & kidney); Flegal et al. 1981 (Pinnipedia; Hg in mussels, Mytilus californianus; Fordyce et al. 1979 (Ziphius cavirostris; heavy metals & atherosclerosis in stranded animals; New Brighton, New Zealand); Frank et al. 1973 (Pagophilus groenlandicus; organochlorine residues; E. Canada); Freeman & Horne 1972 (Pusa hispida; Erignathus barbatus; Phoca vitulina; Halichoerus grypus; Hg; Canada), 1973 (Pinnipedia; Hg; Canada); Freeman et al. 1975 (Pagophilus groenlandicus; steroidogenesis in vitro without & with CH_3Hg treatment in vivo; cortisol; corticosterone & 4-androstene-3,17-dione in liver, kidney & spleen), 1975a (Halichoerus grypus; Pagophilus groenlandicus; effects of contaminants on steroidogenesis); Frost et al. 1979 (Pusa hispida; Erignathus barbatus; Cetacea; feeding patterns, trophic relationships & possible effect of offshore petroleum developments); Galster 1971 (Pinnipedia; Hg; Alaska), 1976 (Pinnipedia; Inuit; Hg; Alaskan mothers & infants); Galster & Burns 1972 (Pusa hispida; Phoca vitulina; Odobenus rosmarus; accumulation of pesticides; Alaska); Gaskin et al. 1962 (Phocoena phocoena; Hg; Bay of Fundy region), 1973 (Phoca vitulina; Hg, DDT & PCB in depot fat of lactating female & male; Bay of

Fundy & Gulf of Maine), 1974 (Globicephala macrorhyncha; Stenella longirostris; P. vitulina; Hg, DDT, dieldrin & PCB in muscle, liver & blubber; St. Lucia, Lesser Antilles), 1979 (P. phocoena; changes in Hg levels in adult muscle, cerebrum, cerebellum, kidney, liver & mammary glands; Bay of Fundy, during 1969-77); George & Frear 1966 (Hydrurga leptonyx; Leptonychotes weddelli; pesticides; Antarctica); Geraci 1976 (Pusa hispida; direct & indirect aspects of petroleum oil; Beaufort Sea); Geraci & St. Aubin 1980 (Marine mammals; bibliography; offshore petroleum resource development, review & research recommendations); Geraci & Smith 1976 (Pusa hispida; direct & indirect effects of petroleum oil; Beaufort Sea), 1977 (Pusa hispida; Pagophilus groenlandicus; physiology & consequences of fouling), 1977a (P. groenlandicus; P. hispida; behavior & pathophysiology in exposure to crude oil); Geraci et al. 1983 (Tursiops truncatus; can detect oil); Gilmartin et al. 1975 (Zalophus californianus; effects of environmental pollutants); Godfrey 1977 (Cetacea; meal & solubles in pig diets & Hg accumulation in their carcass); Goldblatt & Anthony 1983 (Callorhinus ursinus; heavy metals; Pribiloff I., Alaska); Goodale et al. 1981 (Cetacea; responses to Regal Sword oil spill); Hamanaka et al. 1977 (Histriophoca fasciata; Cd & Zn; Okhotsk Sea), 1982 (Eumetopias jubata; age related change & distribution of Cd & Zn concentrations in kidney & liver; Hokkaido, Japan); Harms et al. 1977/78 (Phoca vitulina; Pusa hispida; Halichoerus grypus; Phocoena phocoena; Hyperoodon ampullatus; Delphinapterus leucas; PCB, DDT, Cu, Zn, Cd, Pb & Hg in muscle, blubber, brain & liver; Germany); Helle et al. 1976a (Pusa hispida; PCB & DDT in pregnant & non-pregnant females & on reproduction; Bothnian Bay), 1976b (P. hispida; DDT & PCB in fetal & in pregnant & non-pregnant females; occlusion of uterine horn), 1976c (P. hispida; Halichoerus grypus; environmental poisons; endocrinology), 1983 (P. hispida; levels of DDT, PCB, chlordane & chlorophenol in liver fat, inland population; E. Finland); Helminen et al. 1968a (Pusa hispida; Hg content; Lake Saimoa, Finland), 1968b (Phoca vitulina saimensis; Hg in freshwater seals; Finland), 1972 (Pinnipedia; PCB content; Finland); Henriksson et al. 1969 (Pinnipedia; Hg content); Henry & Best 1983 (Balaenoptera acutorostrata; Balaenoptera physalus; Balaenoptera borealis; DDT, dieldrin & PCB in blubber); Heppleston 1973 (Halichoerus grypus; PCB, DDT & dieldrin in blubber, liver & kidney of suckling pups & mothers; variations with age); Heppleston & French 1972 (Pinnipedia; Hg & other metals; Great Britain), 1973a (Phoca vitulina; Halichoerus grypus; Hg & other metals; Great Britain); Hidka & Tatsukawa 1981 (Lobodon carcinophagus; Leptonychotes weddelli; chlorinated hydrocarbons; Antarctic); Holden 1969 (Halichoerus grypus; organochlorine residues), 1971a (Pusa hispida; Phoca vitulina; organochlorine residues, North Sea), 1971b (Pagophilus groenlandicus; organochlorine residues in pups), 1972 (P. hispida; Pagophilus groenlandicus; Cystophora cristata; Halichoerus grypus; Phoca vitulina; monitoring organochlorine contamination), 1975 (H. grypus; P. vitulina; P. groenlandicus; accumulation of oceanic contaminates; DDT, dieldrin, PCB, Hg & other metals in blubber & tissues), 1978 (H. grypus; organochlorine residues in blubber; Farne I.), 1978a (P. hispida; H. grypus; P. groenlandicus; P. vitulina; Zalophus californianus; pollutants), 1981 (Pinnipedia; organochlorines; overview); Holden & Marsden 1967 (Halichoerus grypus; Phoca vitulina; Pagophilus groenlandicus; DDT & dieldrin in liver, brain & blubber); Holtzman 1969 (Pinnipedia; concentration of naturally occurring radionuclides, Ra-226, Pb-210 & PO-210); Honda et al. 1982 (Stenella coeruleoalba; distribution of heavy metals in organs & tissues), 1983 (Stenella coeruleoalba; heavy metal concentrations in muscle liver & kidney & their variations with body length, weight, age & sex); Hunt 1968 (Pinnipedia; measurement of radioactivity in eyes); Hyland et al. 1977 (Pinnipedia; Cetacea; petroleum hydrocarbons; ecosystem); Indian & Northern Affairs Canada 1981 (Ursus maritimus; effects of crude oil); Jansson et al. 1975 (Pinnipedia; PCB & metabolites & p',p-DDE in droppings; GC-MS identification), 1979 (Halichoerus grypus; chlorinated terpenes & chlordane components; Swedish waters); Jenness & Odell 1978 (Kogia breviceps; DDT, dieldrin & PCB 1203 in milk); Jensen et al. 1969 (Halichoerus grypus; DDT & PCB; Sweden), 1979 (Pinnipedia; PCB & DDT on reproduction; number & identity of anthropogenic substances); Jensen & Janssen 1976 (Pinnipedia; PCB, DDT & metabolites; inhibition of reproduction; Baltic Sea), 1976a (Halichoerus grypus; Pusa hispida; Phoca vitulina; anthropogenic substances from the Baltic; methylsulfone metabolites of PCB's & DDE); ; Jensen & Jorgensen 1983 (Pinnipedia; polychlorinated terphenyls, levels & biological effects); Johansen et al. 1980 (Pagophilus groenlandicus; Pusa hispida; Cystophora cristata; heavy metals & organochlorines in Greenland); Jones et al. 1972 (Marine mammals; Hg; Tay region), 1975 (Pagophilus groenlandicus; biocide residues), 1976 (Pagophilus groenlandicus; DDT, dieldrin, PCB & Hg residues in liver, kidney, brain & blubber of males, females, neonatal & lactating adult); Kaegi et al. 1980 (Pinnipedia; metallothionein metal thiolate protein); Kari & Kauranen 1978 (Pusa hispida; Hg & Se; Finland); Kerkhoff & de Boer 1982 (Phoca vitulina; identification of chlordane compounds; Netherlands); Kerkhoff et al. 1981 (Phoca vitulina; Langenorhynchus albirostris; heptachlor epoxides); Kim 1974 (Callorhinus ursinus; Hg in tissues & lice); King 1983 (Pinnipedia; general); Kishore & Guinn 1972 (Cetacea; Pinnipedia; Hg, Se & Zn baseline studies); Knap & Jickells 1983 (Ziphius cavirostris; DDT, PCB & trace metals); Koeman 1973 (Marine mammals; PCB); Koeman et al. 1973a (Phoca vitulina; Halichoerus grypus; Cystophora cristata; Pagophilus groenlandicus; correlation between Hg & Se in the tissues), 1972 (Pinnipedia; persistent chemicals), 1973b (Phocoena phocoena; Delphinus delphis; Tursiops truncatus; Sotalia guianensis; Lagenorhynchus obscurus; Hg-Se correlations); Koeman & van Genderen 1966 (Phoca vitulina; marine mammals; residues of chlorinated hydrocarbons), 1975 (Marine mammals; Hg, Se & CH_3Hg); Kostareva et al. 1970 (Pusa hispida; Phoca vitulina; Sr-90, Sr & Ca in some hydrobionts of Sea of Okhotsk); Kurtz & Kim 1976 (Callorhinus ursinus; hydrocarbon & biphenyl residues in tissues & lice); Landis 1971 (Pinnipedia; oil spill harmless?); Lawrence & Dougherty 1981 (Marine mammals; polychlorinated dibenzofurans in environmental samples); Le Boeuf 1971 (Mirounga angustirostris; oil conta-

mination & mortality; negative finding; Santa Barbara oil spill); Le Boeuf & Bonnell 1971 (Zalophus californianus; DDT in blubber); Lentfer 1976 (Ursus maritimus; environmental contaminants); Lee et al. 1977a (Zalophus californianus; metallothionein & subcellular localization of Hg & Cd; nuclear fraction); Lehmann & Peterle 1969 (Cetacea; DDT); Lock & Solly 1976 (Cetacea; DDT concentration in liver); Lockwood 1976 (Pinnipedia; Cetacea; affect of pollutants); Lunde 1970 (Balaenoptera physalus; As & Se in tissue); Lydekker 1895 (Marine mammals; handbook of British mammals); Malins 1977 (Pusa hispida; Pagophilus groenlandicus; oil fouling; Arctic & Subarctic); Mansfield 1980 (Pinnipedia; Cetacea; impact of oil production); Mansfield & Sergeant 1973 (Pinnipedia; seals as indicators of pollution); Martin et al. 1976 (Zalophus californianus; Hg, Se, Br, Cd, Ag, Cu, Fe, Zn, Mn, K, Na, Ca & Mg in premature & normal pups & females); McKie et al. 1980 (Halichoerus grypus; heavy metals; E. Scotland); Mohindra & Downs 1966 (Pinnipedia; Cs-137 activity in seals); Momoshima et al. 1981 (Cetacea; radioisotopes; Ra-226, K-40, Cs-137, Cs, Rb, Co-60 & Co in muscle & lung); Müller-Welle 1974 (Pusa hispida; oil pollution, Repulse Bay, Naujaa, N.W.T.); Murphy 1968 (Pinnipedia; enzymatic activity & pesticide residues); National Research Council 1978 (Pinnipedia; As in Canadian environment); Northrup 1981 (Phoca vitulina; detoxification of CH_3Hg); Odell 1979 (Tursiops truncatus; Kogia simus; Kogia breviceps; chlorinated hydrocarbons & trace metals; S.E. Florida); Ohi et al. 1980 (Physeter catodon; protective potency of meat on neurotoxicity of CH_3Hg; its relationship with organ distribution of Hg & Se in the rat); Olafson & Thompson 1974 (Halichoerus grypus; Callorhinus ursinus; isolation of heavy metal-binding proteins; metallothioneins of Cd & Cu); Olsson 1978 (Pusa hispida; Phoca vitulina; Halichoerus grypus; PCB in Baltic); Oritsland & Smith 1976 (Pusa hispida; effect of crude oil on fur; energy balances); O'Shea et al. 1980 (Tursiops truncatus; Steno bredanensis; DDE, p,p^1-DDT, p,p^1-DDE & PCB in blubber); Osterberg et al. 1964 (Balaenoptera physalus; γ-emmitters; Zn-66, K-40, Mn-54, Cs-137, Zr-95, Nb-95, Ce-141,144 & Ru-103,106); Parchevskii et al. 1973 (Pusa hispida; Phoca largha; Histriophoca fasciata; Sr-90 content in bone & muscle; Bering Sea & Sea of Okhotsk); PCB Conference 2 1973 (Marine mammals; PCB); Pearce et al. 1973 (Pagophilus groenlandicus; Cystophora cristata; Halichoerus grypus; Phoca vitulina; toxic chemicals; Gulf of St. Lawrence); Peel 1975 (Lobodon carcinophagus; organochlorine residues in Antarctic snow); Percy 1977 (Pusa hispida; effects on oil; nutrition); Percy 1977 (Pusa hispida; effects on oil; nutrition); Petrov & Federov 1967 (Cystophora cristata; Pagophilus groenlandicus; Sr-90 content in bone); Pimelott 1974 (Pusa hispida; search for oil & gas in Arctic waters); Pitcher & Calkins 1975 (Phoca vitulina; Eumetopias jubata; distribution in relation to petrochemical development; Prince William Sound & Gulf of Alaska); Portmann 1975 (Pinnipedia; Cetacea; bioaccumulation & effects of organochlorine pesticides); Ramprashad & Ronald 1947 (Pagophilus groenlandicus; surface preparation study on effect of CH_3Hg on sensory hair cell population in the cochlea); Rappe et al. 1981 (Halichoerus grypus; identification of polychlorinated dibenzofurans in environmental samples); Reijnders 1979 (Phoca vitulina; organochlorine & heavy metal residues; Schleswig Holstein, Denmark & The Netherlands), 1980 (P. vitulina; PCB, o,p^1-DDT, DDT, DDE, p,p^1-TDE, endrin, endosulfan, heptachlor epoxide, pentachlorobenzene, hexachlorobenzene, Se, Hg & CH_3Hg; effect on reproduction; Wadden Sea), 1982a (P. vitulina; population dynamics, residue levels & management; toxic compounds in Wadden Sea), 1982b (Pinnipedia; diminishing fertility possibly due to exposure to large amounts of PCB, Netherlands); Reish 1976 (Cetacea; Pinnipedia; marine pollution); Renberg et al. 1978 (Halichoerus grypus; polychlorinated terphenyls; Sweden); Risebrough 1978 (Marine mammals; bibliography; literature review & research recommendations); Risebrough et al. 1976 (Hydrurga leptonyx; transfer of PCB to Antarctica; p,p^1-DDE & p,p^1-DDT in penguin food); Roberts et al. 1976 (Phoca vitulina; distribution of heavy metals in tissues; Cd, Hg, & Hg in liver); Ronald 1975 (Pagophilus groenlandicus; CH_3Hg toxicity); Ronald et al. 1975 (Pagophilus groenlandicus; effects of CH_3Hg), 1977 (Pagophilus groenlandicus; CH_3Hg poisoning); Ronald & Tessaro 1976 (Pagophilus groenlandicus; CH_3Hg poisoning); Rosewell & Baker 1979 (Pagophilus groenlandicus; organochlorine pesticide residues); Rosewell et al. 1979 (Pagophilus groenlandicus; organochlorine residues in tissues; methods; Gulf of St. Lawrence); Russel 1969 (Mirounga angustirostris; offshore oil leak); Sachitanantan & Hiyama 1965 (Balaenoptera physalus; concentration of gamma-emitting nuclides; Cs-137,Zn-65, Zn, Mn, Cs & K); Samuels et al. 1970 (Pagophilus groenlandicus; Balaenoptera physalus; Sr-90 & Cs-137 levels in tissues); Saschenbrecker 1973 (Balaenoptera physalus; levels of DDT & PCB compounds); Schneppenheim 1980 (Lobodon carcinophagus; Cetacea; fluoride concentration in Antarctic); Serat et al. 1977 (Pinnipedia; Inuit; DDE & DDT in Inuit; blood & diet); Sergeant 1980 (Cystophora cristata; Pagophilus groenlandicus; Hg & organochlorine residues in tissues; St. Lawrence estuary); Sergeant & Armstrong 1973 (Pagophilus groenlandicus; Halichoerus grypus; Phoca vitulina; Cystophora cristata; Hg; E. Canada); Shaw 1971b (Phoca vitulina; Enhydra lutris; DDT, DDD & DDE in fats); Simpson 1970 (Pinnipedia; observations on effects of pollution); Sladen et al. 1966 (Lobodon carcinophagus; penguins; DDT residues; Antarctica); Smith 1974 (Marine mammals; environmental implication of oil drilling in E. Gulf of Mexico; symposium); Smith & Armstrong 1975 (Pusa hispida; Erignathus barbatus; Hg; Inuit food item), 1978 (P. hispida; E. barbatus; Hg & Se in tissues from Arctic Canada); Smith et al. 1983 (Tursiops truncatus; controlled oil spill); Sokolova 1969 (Eschrichtius robustus; Halichoerus grypus; artificial radioactivity in tissues); Sokolova & Parchevskii 1968 (Pusa hispida; radioactivity), 1972 (P. hispida; Pb-210 in some aquatic fauna; Okhotsk & Bering seas); Sokolova et al. 1971 (Pusa hispida ochotensis; determination of Sr-90 in marine organisms); Soldatovic & Petrovic 1970 (Cetacea; complex-forming preparations as antidotes during fatal poisoning; effect of dithiocarbamate during acute poisoning of porpoise with Tl & As); Stalling et al. 1982 (Halichoerus grypus; polychlorinated dibenzofurans); Stirling & Calvert 1983 (Marine mammals; environmental threats; Canadian Arctic); Stoneburner 1978 (Globicephalus macro-

rhyncha; Se, Se, Cd & Hg in kidney, liver & blubber); Straughan 1972 (Zalophus californianus; Mirounga angustirostris; biological effect of oil pollution; Santa Barbara Channel); Sundstrom et al. 1975 (Pinnipedia; structure of phenolic metabolites of p,p'-DDT); Takei & Leong 1981 (Monachus schauinslandi; microanalytical methods used to analyze p,p'-DDE, PCB & pentachlorophenol in blubber, lung & testes); Tanabe et al. 1982 (Stenella coeruleoalba; transplacental transfer of PCB & polychlorined hydrocarbons pesticides from mother to unborn), 1981 (S. coeruleoalba; distribution of PCB, hexachlorobenzene isomers & hexachlorocylohexane in body & tissue organs of female and in unborn; most occurs in blubber); Taruski et al. 1975 (Megaptera novaeangliae; Physeter catodon; Globicephala melaena; Globicephala scammoni; PCB, DDT, chlordane & dieldrin levels in blubber of 18 spp.); Tallon & Ruzicka 1967 (Lobodon carcinophagus; Leptonychotes weddelli; organochlorine pesticides in Antarctica); Taverner 1975 (Cetacea; meal & solubles in pig feed & Hg accumulation in pig tissues); Ten Noever de Brauw et al. 1973 (Phoca vitulina; Mirex); Tessaro 1975 (Pagophalus groenlandicus; structure of brain; CH_3Hg); Tessaro & Ronald 1976 (P. groenlandicus; CH_3Hg poisoning; physiology); Tillander et al. 1970 (Pusa hispida; excretion rate of CH_3Hg), 1970a (Pusa hispida; excretion rate of CH_3Hg); U.S. Antarctic Project Officer 1965 (Pinnipedia; pesticides in seal & penguins in Antarctic); Van de Ven et al. 1979 (Halichoerus grypus; Hg, Se & CH_3Hg in liver, kidney, brain, blood & thryoid of wild & captive); Van Der Zande & De Ruiter 1983 (Phoca vitulina; lipid; quantitation of PCB by microwave plasma detection & analysis in PCB in blubber lipid); Van Hove-Holdrinet 1979 (Pinnipedia; Mirex & cis- & trans-chlordane); Vernberg 1976 (Pinnipedia; pollution); Viale 1978 (Stenella coeruleoalba; Te, Ti, Cr, V, Cd, Pb & Hg in blubber, muscle, liver & brain; W. Mediterranean); Vincenti & Chabert 1978 (Cetacea; Cu, PB, PCB, DDT, DDE, DDD & hexachlorocyclohexane in blubber of stranded dolphin; Mediterranean Sea); Wagemann et al. 1983 (Monodon monoceros; heavy metals in tissues & organs); Wagemann & Muir 1984 (Cetacea; Pinnipedia; organochlorine & heavy metal concentrations; overview & evaluation); Windom 1972 (Marine mammals; As, Cd, Cu, Pb, Hg & Zn in marine biota; N. Atlantic Ocean); Wolman & Wilson 1970 (Eschrichtius robustus; Physeter catodon; DDT & dieldrin in brain, blubber & liver); Yoshida & Nakamura 1977 (Halichoerus grypus; PCB & methylsulfones in blubber), 1979 (Pinnipedia; methylsulfone metabolites of PCB); Zitko 1975 (Pinnipedia; Cetacea; aromatic hydrocarbons).

VITAMINS

Agawa et al. 1956 (Cetacea; vitamin A in liver oil); Bergan & Bell 1978 (Inuit; biochemical assessment of nutritional status; Alaska; thiamine & riboflavin deficiencies); Berner 1952 (Cetacea; recovery of vitamins in liver); Brachi 1953 (Physeter sp.; components of cephalopods & liver oil; carotene, vitamin A & anhydrovitamin A in oil); Braekkan 1948 (Balaenoptera acutorostrata; Balaenoptera musculus; Physeter catodon; Balaenoptera physalus; vitamin A & D, niacin, riboflavin & thiamine in liver, blubber areas & tongue), 1949 (Cetacea; vitamin A determination in liver oils); Brockova 1971 (Marine mammals; liver vitamin A content); Bukin & Skorobogatova 1951 (Physeter catodon; liver as source of vitamin A); Cleland & Southcott 1969 (Erignathus barbatus; Neophoca cinerea; Hydrurga leptonyx; Arctocephalus pusillus; illness following eating liver); Clough et al. 1947 (Cetacea; vitamin A & sterols in liver oil); Cortes 1952 (Cetacea; nicotinic acid determination of tissues); Cunningham 1935 (Cetacea; vitamin D content in blubber); de Heus and de Man 1951 (Cetacea; vitamin B_{12} content in condensed-solubles); Dolbish 1955 (Odobenus rosmarus; Erignathus barbatus; vitamin A content of liver); Doutt 1940 (Ursus maritimus; toxicity of livers); Efremov 1977 (Pinnipedia; Cetacea; vitaminology in USSR during the past 60 years; vitamin A & D in fats); Egorova 1964 (Physeter catodon; Balaenoptera physalus; vitamin A & kitol content in liver), 1968 (Physeter catodon; Balaenoptera physalus; vitamin A level change during perservation of whole liver by γ-irridiations); Egorova & Kryuchkova 1967 (Cetacea; vitamin B_{12} content & chemical composition of liver, spinal cord, marrow, spleen & kidney); Engelhardt 1974 (Pagophilus groenlandicus; vitamin E deprivation), 1977a (Pagophilus groenlandicus; plasma & tissue levels of dietary dl-γ-tocopherol; radiolabelled); Engelhardt & Geraci 1975 (Pagophilus groenlandicus; tocopherol uptake & distribution), 1978 (P. groenlandicus; effects of experimental vitamin E deprivation on Na, electrolyte & molting patterns); Engelhardt et al. 1975 (Pagophilus groenlandicus; tocopherol distribution in skeletal muscle & blubber); Gavrilenko 1952 (Odobenus rosmarus; Erignathus barbatus; Pusa hispida; vitamin A content of liver from Chukchi Sea); Geraci 1968 (Marine mammals; diet-induced thiamine deficiency in captive), 1970 (Pagophilus groenlandicus; fish-induced thiamine deficiency; thiaminase), 1972a (P. groenlandicus; experimental thiamine deficiency; feeding herring), 1974 (Halichoerus grypus; Zalophus californianus; Pagophilus groenlandicus; Phoca vitulina; thiamine deficiency & prevention; high blood cell transketolase); Geraci & Smith 1979 (Inuit; vitamin C in diet; Holman, N.W.T.); Gray et al. 1951a (Cetacea; riboflavin, nicotinic acid, pantothenic acid, pyridoxine, essential amino acids, Ca & P in water-soluble solids), 1951b (Physeter catodon; Balaenoptera physalus; Megaptera nodosa; Balaenoptera borealis; composition of liver extract, B vitamins; minerals); Green & Singleton 1954 (Cetacea; vitamin A determination in liver oil); Gregory et al. 1955 (Balaenoptera sibbaldi; Balaenoptera musculus; composition of milk; vitamin A, thiamin, biotin, riboflavin, nicotinic acid, vitamin B_6, pantothenic acid, vitamin B_{12}, minerals, proteins & fat content); Gridgeman et al. 1948 (Cetacea; vitamin estimation in liver); Guttmann 1955 (Pinnipedia; extracts & enzymic hydrolysates of liver; choline, thiamine, riboflavin, folic acid, niacin, pantothenic acid, vitamin B_{12} & 7 minerals); Halse 1953 (Cetacea; vitamin A in liver oil); Hay & Watson 1976 (Marine mammals; plasma transport of 25-hydroxycolecalciferol); Heller 1956 (Marine mammal; tocopherol & vitamin A content of blubber); Higashi et al. 1951 (Physeter sp.; vitamin A in oil), 1960 (Balaenoptera physalus; Pinnipedia; vitamin A, B_1, B_2, B_6 and fatty acid composition of liver of whales & pregnant & non-pregnant fur seals); Hippe et al. 1977 (Cetacea;

cobalmin-binding proteins in stomach & serum of porpoise; molecular sizes & binding capacities); Hirao et al. 1950 (Balaenoptera physalus; Balaenoptera musculus; vitamin A content in oil); Hjarde 1950 (Cetacea; vitamin A determination by spectrophotometry); Imamura 1944 (Callorhinus ursinus; oil & vitamin A); Kabaivanski 1955 (Cetacea; vitamin A & D in fat); Kalenas 1982 (Marine mammals; ascorbic acid levels in plasma, Antarctica); Krutchenskii 1968 (Cetacea; use of NaCl for extracting vitamin from liver), 1978 (Cetacea; dry vitamin-protein preparation from dried livers); Krutchinskii et al. 1977 (Cetacea; use of antioxidants to prevent decomposition of vitamin A in oil); Lategan 1948 (Arctocephalus pusillus; vitamin A production in South Africa; vitamin A content); Lavigne & Ronald 1975 (Pagophilus groenlandicus; Phoca vitulina; Halichoerus grypus; Callorhinus ursinus; visual pigments); Lewis & Lentfer 1967 (Erignathus barbatus; Pusa hispida; Ursus maritimus; vitamin A content of liver); Lythgoe & Dartnall 1970 (Mirounga leonina; deep sea rhodopsin); Maksimov 1967 (Cetacea; liver vitamin A concentrate); Matsko & Vitali 1930 (Erignathus barbatus; vitamin D content in oils); Mayfield et al. 1955 (Cetacea; riboflavin & thiamine contents of hen eggs fed dried condensed-solubles); Minato 1949 (Phoca vitulina; constituents of body oil; vitamin A); Mironova 1951 (Delphinapterus leucas; vitamin A content in fat); Miyagawa & Ueno 1958 (Marine mammals; content of B vitamins in liver & liver extracts); Miyauchi & Sanford 1947 (Callorhinus ursinus; vitamin A content in oil); Mori & Asakawa 1941 (Balaenoptera musculus; cold storage on vitamin A content in liver oil); Morton & Stubbs 1946 (Cetacea; vitamin A in liver oil); Mrochkov 1951 (Physeter catodon; Balaenoptera musculus; Balaenoptera physalus; Megaptera novaeangliae; vitamin A content in liver); Nakayama 1950 (Balaenoptera physalus; Balaenoptera musculus; vitamin A content in liver & fecal oil); Neilands 1947 (Marine mammals; Nova Scotia); Nikolaeva & Perepletchik 1962 (Cetacea; vitamin A content in liver); Nonaka 1952 (Cetacea; vitamin B_1 & B_2 in meat); Novikova 1952 (Cetacea; Black Sea dolphin; vitamin B_1 & B_2 content), 1953 (Balaenoptera physalus; Balaenoptera musculus; vitamin B_1 & B_2 in liver, kidney, heart, tongue & brain); Oki & Ueno 1959 (Cetacea; vitamins A_1, B_2 & B_{12}, nicotinic acid & protein content of liver); Oseki 1934 (Balaenoptera physalus; Balaenoptera borealis; vitamin A & E content of liver; nutritive value); Perepletshik 1951 (Cetacea; porpoise; vitamin A content in liver & other internal organs; Baltic & Azov Sea basins); Pritchard & Cawthorne 1955 (Cetacea; riboflavin, niacin, pantothenic acid, pyridoxine, inositol & vitamin B_{12} in meat); Pritchard & Wraige 1952 (Cetacea; vitamin B complex in liver & meat; animal food); Rankov & Iovchev 1955 (Delphinus delphis; vitamin A content of subcutaneous tissues under different rendering conditions); Rigdon & Drager 1955 (Zalophus californianus; thiamine deficiency on diet of frozen fish); Rodahl 1949a (Ursus maritimus; toxicity of liver), 1949b (Cystophora cristata; Pagophilus groenlandicus; vitamin sources in the Arctic region); Rodahl & Davies 1949 (Cystophora cristata; Pagophilus groenlandicus; Halichoerus grypus; Phoca vitulina; vitamin A content in liver); Rodahl & Moore 1943 (Ursus maritimus; Erignathus barbatus; vitamin A content & toxicity of the liver); Sabasi et al. 1950 (Balaenoptera physalus; Balaenoptera musculus; biological potency of liver vitamin A & its molecular distillates); Saiki 1954a (Berardius bairdi; fatty acid composition of liver lipids; vitamin A & B_{12} in liver), 1954b (Berardius bairdi; vitamin A in liver oil); Sanford et al. 1949 (Callorhinus ursinus; vitmin A in liver); Scheffer et al. 1950 (Callorhinus ursinus; vitamin A in selected pale-colored livers; Alaska); Schmidt 1950 (Physeter catodon; Balaenoptera physalus; Megaptera novaeangliae; assay vitamin A in liver oils; British Columbia); Sergeev 1962 (Cetacea; enrichment of oil with vitamin D); Shaughnessy 1981 (Arctocephalus pusillus; geographical variation of vitamin A content of male adult livers); Shaw 1971a (Tursiops truncatus; neutral carbohydrates in milk; myo-inositol & scyllo-inositol); Shel'puk 1957 (Pinnipedia; vitamin A in fat); Shimma & Taguchi 1961 (Callorhinus ursinus; survey of liver oil & its vitamin A content); Sidwell 1981 (Cetacea; chemical & nutritional composition of products; vitamins); Southcott 1982 (Neophoca cinerea; vitamin A content of liver); Southcott et al. 1971 (Pinnipedia; vitamin A content in livers; Antarctic & subantarctic), 1974 (Arctocephalus pusillus doriferus; vitamin A content in the liver); St. Aubin & Geraci 1980 (Pagophilus groenlandicus; Phoca vitulina; Globicephala melaena; Physeter catodon; Kogia breviceps; Tursiops truncatus; ascorbic acid levels in adrenal, epidermis, muscle & blubber); Suzuki et al. 1983 (Delphinus delphis; histochemical properties of myofibers of longissimus muscle; menadione oxidoreductase); Takaoka et al. 1946 (Cetacea; vitamin A content in dolphin liver); Tarr et al. 1950 (Cetacea; vitamin B_{12} content in products), Tawara & Fukazawa 1950a (Cetacea; vitamin A content in liver), 1950b (Cetacea; kitol fraction on vitamin A determination), 1950c (Cetacea; factors influencing vitamin A & kitol decomposition), Thompson & Kon 1950 (Cetacea; vitamin A content in liver; derived from crustacean vitamin A esters); Tsuchiya & Tanaka 1955 (Balaenoptera borealis; vitamin A in liver oil); van Genderen et al. 1950 (Cetacea; determination of vitamin A contents in oil & concentrates); White 1970 (Tursiops truncatus; thiamine deficiency induced by raw fish diet); Wilhem & Tastaldi 1964 (Cetacea; tocopherol in oils); Wo 1973 (Inuit; lipid; vitamin; nutritional status to fatty acids, vitamins A & E); Wo & Draper 1973 (Pinnipedia; Inuit; vitamin E levels in Inuit).

WATER BALANCE

Ando et al. 1979 (Ursus arctos yesoensis; general composition & chemical properties of main components of milk); Andersen & Nielsen 1983 (Phocoena phocoena; exchange of water between animal & environment); Bentley 1963 (Megaptera nodosa; composition of urine in fasting; metabolic water from tissues); Bradley et al. 1950 (Phoca vitulina; water & electrolyte excretion), 1954 (P. vitulina; effect of apnea, Na, K & water loading; pitressin & mercurial diuresis); Costa 1978 (Enhydra lutris; ecological energetics water & electrolyte balance), 1982 (E. lutris; energy, nitrogen & electrolyte flux & sea water drinking); Depocas et al. 1969 (Phoca vitulina; sea water drinking), 1971 (P. vitulina; sea water drinking & water flux in starved & fed); Eichelberger et al. 1940a (Cetacea; dis-

tribution of water & electrolytes in blood of dolphins), 1940 (Tursiops truncatus; distribution of water & electrolytes in skeletal muscle); Engelhardt & Ferguson 1980 (Pagophilus groenlandicus; adaptive changes during the postnatal period; water balance); Fetcher 1939 (Phoca vitulina; Erignathus barbatus); Gentry 1981 (Eumetopias jubata; Zalophus californianus; Callorhinus ursinus; Arctocephalus forsteri; sea water drinking; nitrogen excretion in fasting); Hui 1979 (Delphinus delphis; sea water consumption), 1981 (D. delphis; sea water consumption & water flux; metabolic water; Na); Irving & Fisher 1935 (Pinnipedia; problems of water supply); Irving et al. 1935a (Phoca vitulina); Ladd et al. 1951 (Phoca vitulina; filtration rate & water diuresis; diving); Ohata et al. 1975 (Callorhinus ursinus; water metabolism; body metabolism); Olenchenko 1972a (Pusa caspica; growth dynamics of water volume & mineral content of tissues & organs); Ortiz et al. 1978 (Mirounga angustirostris; water & energy flux in pups fasting under natural conditions); Pilson 1970a (Zalophus californianus); Telfer et al. 1970 (Cetacea; do dolphins drink water?); White et al. 1971 (Phoca vitulina; freshwater ingestion & water flux in captive).